LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 20

2024

Bate Stamp Numbers
01247975 – 01249950

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2024

LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

VOLUME 20

2024

A.	Title:	Report (Cont'd) – Appendix C, File 1 to Quarterly Evaluation Report, 3rd Quarter (July-September) 2023, Groundwater Treatment Plant, Longhorn Army Ammunition Plant Karnack, Texas
	Author(s):	PCI-Bhate JV
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	May 16, 2024
	Bate Stamp:	01247975–01249950

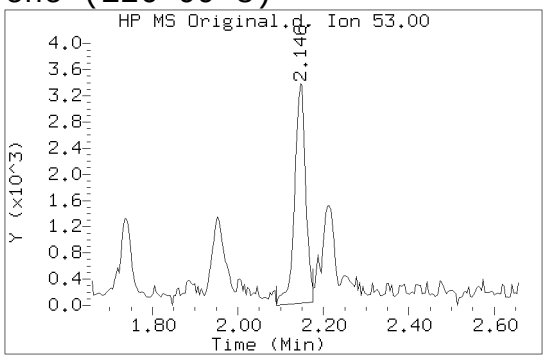
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LabSampID : HS23071846-06MSD

Chloroprene (126-99-8)

Reason Code:

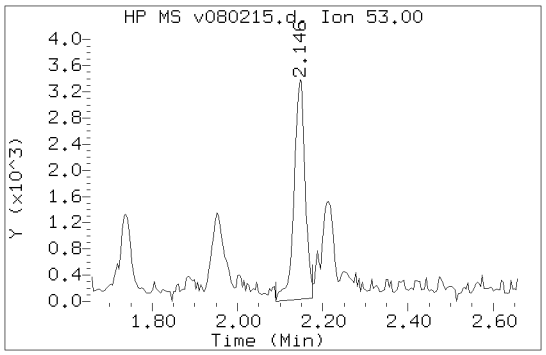
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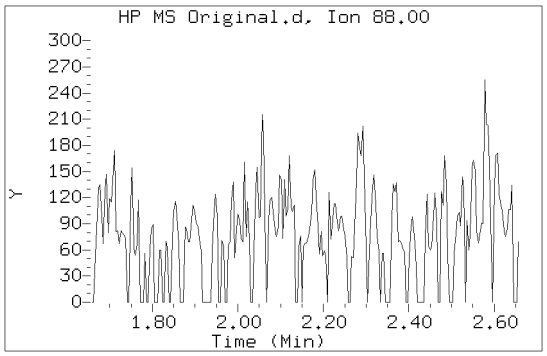
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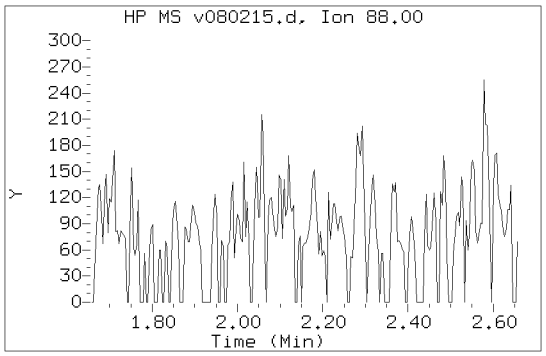
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Report Date: 03-Aug-2023 10:55

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230802.b\V080231.D
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Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	334350	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	98731	50.0000	31.33
3	Chloromethane	50	1.299	1.299	(0.270)	178072	50.0000	45.34
5	Vinyl Chloride	62	1.378	1.378	(0.286)	126135	50.0000	38.31
6	Bromomethane	94	1.617	1.617	(0.336)	83612	50.0000	47.01
7	Chloroethane	64	1.700	1.700	(0.353)	83930	50.0000	40.48
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	178046	50.0000	43.82
9	Acrolein	56	1.749	1.749	(0.363)	17111	100.000	79.78
10	Acetone	43	2.408	2.408	(0.500)	114500	100.000	110.19
11	1,1-Dichloroethene	96	2.333	2.333	(0.485)	89365	50.0000	40.56
15	Iodomethane	142	2.468	2.468	(0.513)	174816	100.000	83.70
16	Acrylonitrile	53	3.068	3.068	(0.637)	108605	100.000	103.33
17	Methylene Chloride	84	2.795	2.795	(0.580)	125895	50.0000	47.03
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	383577	50.0000	56.33
19	Carbon Disulfide	76	2.521	2.521	(0.524)	514537	100.000	80.23
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	106629	50.0000	43.19
21	Vinyl Acetate	43	3.608	3.608	(0.749)	485160	100.000	68.67
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	202494	50.0000	44.87
24	2-Butanone	43	4.268	4.268	(0.886)	117724	100.000	89.62
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	95576	50.0000	30.72

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	127708	50.0000	46.34
28 Chloroform	83	4.571	4.571 (0.949)	259288	50.0000	49.38

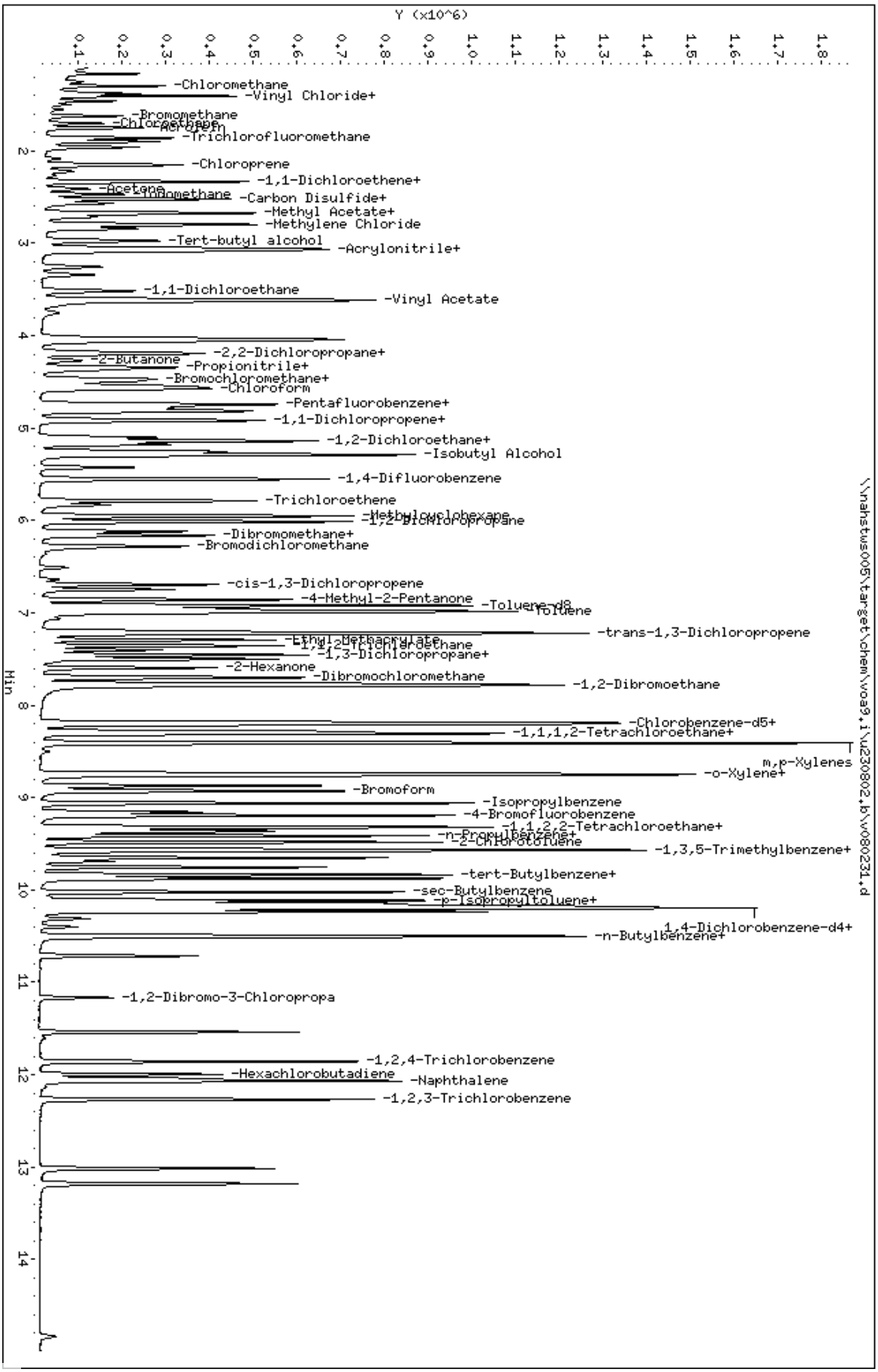
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	73702	50.0000	45.20
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	148459	50.0000	55.62
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	195660	50.0000	47.89
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	155250	50.0000	41.53
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	231884	50.0000	53.49
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	147735	50.0000	44.12
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	185185	50.0000	63.95
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	503369	50.0000	
	37 Benzene	78	5.137	5.137	(0.925)	529812	50.0000	43.08
	38 Trichloroethene	130	5.790	5.790	(1.043)	163467	50.0000	47.03
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	189681	50.0000	48.23
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	143155	50.0000	43.43
	44 Dibromomethane	93	6.120	6.120	(1.102)	101041	50.0000	47.73
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	341555	100.000	91.24
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	199234	50.0000	40.19
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	503056	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	580741	50.0000	49.63
	50 Toluene	91	6.982	6.982	(0.853)	596983	50.0000	43.64
	51 trans-1,3-Dichloropropene	75	7.195	7.195	(1.296)	176117	50.0000	46.46
	52 2-Hexanone	43	7.593	7.593	(0.928)	226010	100.000	91.18
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	125064	50.0000	42.69
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	271316	50.0000	45.15
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	172409	50.0000	47.95
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	129989	50.0000	39.09
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	165577	50.0000	46.98
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	97206	50.0000	36.98
	59 Chlorobenzene	112	8.208	8.208	(1.003)	431278	50.0000	44.48
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	158930	50.0000	44.97
	61 Ethylbenzene	106	8.305	8.305	(1.015)	195318	50.0000	44.49
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	498889	100.000	96.81
	63 o-Xylene	106	8.747	8.747	(1.069)	253111	50.0000	50.20
	64 Styrene	104	8.762	8.762	(1.071)	396277	50.0000	50.37
	66 Bromoform	173	8.920	8.920	(1.090)	124551	50.0000	49.59
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	583581	50.0000	47.84
	68 1,1,2,2-Tetrachloroethane	83	9.328	9.328	(0.917)	209161	50.0000	37.47
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	259820	50.0000	57.08
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	289757	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	209399	50.0000	43.09
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	624303	50.0000	38.67
	74 Bromobenzene	156	9.317	9.317	(0.916)	210680	50.0000	43.95
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	448388	50.0000	44.27
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	462746	50.0000	45.29
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	528672	50.0000	46.33
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	433347	50.0000	45.17
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	466598	50.0000	45.50
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	507445	50.0000	46.68
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	415498	50.0000	46.47
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	354286	50.0000	44.28
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	376988	50.0000	42.52
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	336905	50.0000	35.24
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	367712	50.0000	44.79
	89 1,2-Dibromo-3-Chloropropane	155	11.169	11.169	(1.098)	34574	50.0000	42.96

90 1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	235834	50.0000	46.70
91 Hexachlorobutadiene	225	11.998	11.998 (1.179)	81874	50.0000	45.23

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.186)	574697	50.0000	43.31
	93 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.206)	240668	50.0000	46.68
M	94 1,2-Dichloroethylene (total)	96				234337	100.000	89.54
M	95 Xylenes (total)	106				752000	150.000	147.02
	135 1,4-Dioxane	88	6.168	6.168	(1.281)	41979	1000.00	875.67
	141 Cyclohexane	56	4.781	4.781	(0.993)	125160	50.0000	33.30
	138 Freon TF	101	2.333	2.333	(0.485)	72918	50.0000	41.55
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	109537	50.0000	41.14
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	353825	50.0000	48.25
	146 Methyl Acetate	43	2.716	2.716	(0.564)	117562	50.0000	49.00
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	284637	1000.00	1012.64
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	172620	1000.00	934.22
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	33056	50.0000	48.59
	12 Isobutyl Alcohol	43	5.287	5.287	(1.098)	488403	1000.00	1031.35
	13 Acetonitrile	39	2.671	2.671	(0.555)	179048	500.000	579.71
	14 Allyl Chloride	41	2.671	2.671	(0.555)	357336	50.0000	50.65
	25 Methacrylonitrile	41	4.496	4.496	(0.934)	96575	50.0000	51.43
	40 Methyl Methacrylate	41	6.157	6.157	(1.279)	154067	50.0000	53.33
	4 Propionitrile	54	4.343	4.343	(0.902)	209373	500.000	527.47
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	160579	50.0000	50.20
	23 Chloroprene	53	2.157	2.157	(0.448)	37554	50.0000	42.84(M)
	49 Ethyl Methacrylate	69	7.293	7.293	(1.313)	237114	50.0000	51.37

QC Flag Legend

M - Compound response manually integrated.



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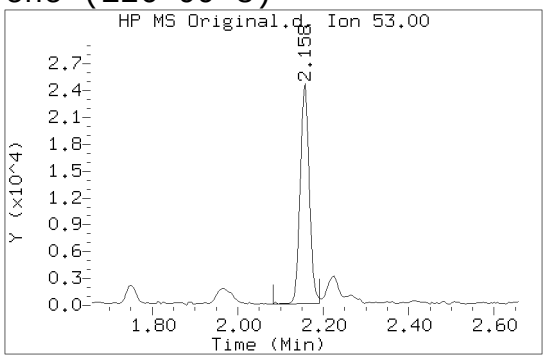
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Operator: PC
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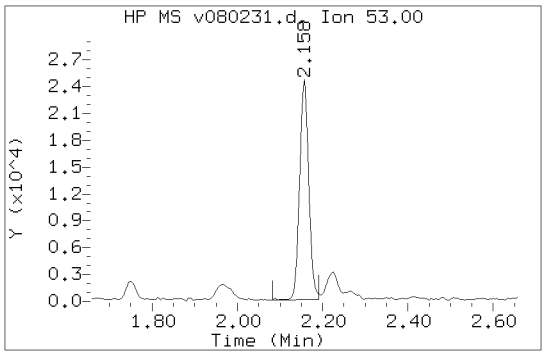
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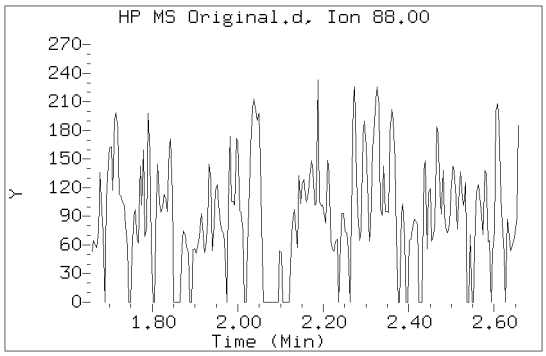
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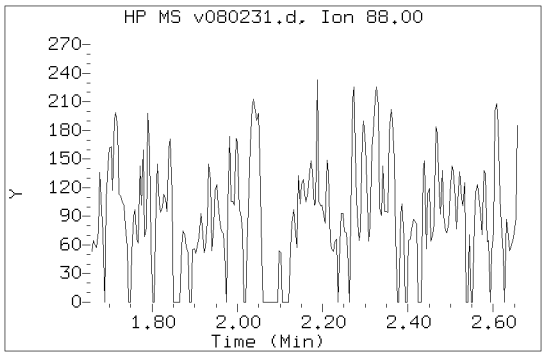
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HS23071456 Wetchem 9056_W

ALS WO# HS23071456

Sequence Overview

Sequence Details

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Directory:	**2022**	*Created By:*	**alshs.nouser**
Data Vault:	**Data Vault**	*Updated On:*	**28/Jul/23 05:48:20**
No. of Injections:	**279**	*Updated By:*	**alshs.nouser**

Injection Details

No.	Injection Name	Position	Type	Level	Inject Time	Status
1	STD1	BA1	Calibration Standard	1	22/Jul/23 16:37:05	Finished
2	STD2	BA2	Calibration Standard	2	22/Jul/23 16:42:52	Finished
3	STD3	BA3	Calibration Standard	3	22/Jul/23 16:48:50	Finished
4	STD4	BA4	Calibration Standard	4	22/Jul/23 16:54:37	Finished
5	STD5	BA5	Calibration Standard	5	22/Jul/23 17:00:35	Finished
6	STD6	BA6	Calibration Standard	6	22/Jul/23 17:06:22	Finished
7	ICV	BA7	Unknown		22/Jul/23 17:12:09	Finished
8	ICB	BA8	Unknown		22/Jul/23 17:41:04	Finished
9	CCV	R1	Unknown		26/Jul/23 06:35:19	Finished
10	CCB	R6	Unknown		26/Jul/23 06:46:54	Finished
11	MBLK-197994	R5	Unknown		26/Jul/23 06:58:29	Finished
12	LCS-197994	R2	Unknown		26/Jul/23 07:04:16	Finished
13	HS23071327-02	RA1	Unknown		26/Jul/23 07:10:14	Finished
14	HS23071327-02MS	RA2	Unknown		26/Jul/23 07:16:02	Finished
15	HS23071327-02MSD	RA3	Unknown		26/Jul/23 07:21:49	Finished
16	HS23071327-03	RA4	Unknown		26/Jul/23 07:27:36	Finished
17	HS23071327-04	RA5	Unknown		26/Jul/23 07:33:24	Finished
18	HS23071327-05	RA6	Unknown		26/Jul/23 07:39:11	Finished
19	HS23071327-06	RA7	Unknown		26/Jul/23 07:44:58	Finished
20	HS23071327-07	RA8	Unknown		26/Jul/23 07:50:45	Finished
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22	CCB	R7	Unknown		26/Jul/23 08:08:07	Finished
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24	HS23071327-09	RB2	Unknown		26/Jul/23 08:25:29	Finished
25	HS23071327-10	RB3	Unknown		26/Jul/23 08:31:16	Finished
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27	HS23071327-12	RB5	Unknown		26/Jul/23 08:42:51	Finished
28	HS23071327-13	RB6	Unknown		26/Jul/23 08:48:38	Finished
29	HS23071327-14	RB7	Unknown		26/Jul/23 08:54:26	Finished
30	HS23071327-15	RB8	Unknown		26/Jul/23 09:00:13	Finished
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35	MBLK	R5	Unknown		26/Jul/23 10:26:41	Finished
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38	HS23070940-05MS	RC4	Unknown		26/Jul/23 10:44:03	Finished
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54	HS23070728-07DF10	RE2	Unknown		26/Jul/23 12:53:34	Finished
55	HS23070940-01	RE3	Unknown		26/Jul/23 12:59:21	Finished
56	HS23070940-01DF20	RE4	Unknown		26/Jul/23 13:05:20	Finished
57	CCV	R1	Unknown		26/Jul/23 13:16:55	Finished
58	CCB	R6	Unknown		26/Jul/23 13:22:43	Finished
59	HS23071590-01DF2	GB7	Unknown		26/Jul/23 13:34:29	Finished
60	HS23071590-02DF2	GB8	Unknown		26/Jul/23 13:40:16	Finished
61	HS23071590-03DF2	GC1	Unknown		26/Jul/23 13:46:04	Finished
62	HS23071590-04DF2	GC2	Unknown		26/Jul/23 13:51:51	Finished
63	HS23071590-05DF2	GC3	Unknown		26/Jul/23 13:57:38	Finished
64	HS23071590-01DF50	GC4	Unknown		26/Jul/23 14:03:25	Finished
65	HS23071590-02DF50	GC5	Unknown		26/Jul/23 14:09:13	Finished
66	HS23071590-03DF50	GC6	Unknown		26/Jul/23 14:15:00	Finished
67	HS23071590-04DF50	GC7	Unknown		26/Jul/23 14:20:47	Finished
68	HS23071590-05DF50	GC8	Unknown		26/Jul/23 14:26:35	Finished
69	CCV1	R3	Unknown		26/Jul/23 14:43:57	Finished
70	CCB	R8	Unknown		26/Jul/23 14:55:31	Finished
71	MBLK	R5	Unknown		26/Jul/23 15:01:19	Finished
72	LCS	R2	Unknown		26/Jul/23 15:07:06	Finished
73	HS23070940-02	RE5	Unknown		26/Jul/23 15:12:53	Finished
74	HS23070940-02DF5	RE6	Unknown		26/Jul/23 15:18:41	Finished
75	HS23070940-03	RE7	Unknown		26/Jul/23 15:24:28	Finished
76	HS23070940-03DF10	RE8	Unknown		26/Jul/23 15:30:15	Finished
77	HS23070940-04	GA1	Unknown		26/Jul/23 15:36:03	Finished
78	HS23070940-04DF20	GA2	Unknown		26/Jul/23 15:41:50	Finished
79	HS23070940-06	GA3	Unknown		26/Jul/23 15:47:37	Finished
80	HS23070940-06DF20	GA4	Unknown		26/Jul/23 15:53:25	Finished
81	CCV	R1	Unknown		26/Jul/23 16:33:56	Finished
82	CCB	R4	Unknown		26/Jul/23 16:45:30	Finished
83	HS23070940-07	GA5	Unknown		26/Jul/23 16:51:18	Finished
84	HS23070940-07DF20	GA6	Unknown		26/Jul/23 16:57:05	Finished
85	HS23070940-08	GA7	Unknown		26/Jul/23 17:02:52	Finished
86	HS23070940-08DF20	GA8	Unknown		26/Jul/23 17:08:40	Finished
87	HS23071051-01	GB1	Unknown		26/Jul/23 17:14:27	Finished
88	HS23071051-01DF20	GB2	Unknown		26/Jul/23 17:20:14	Finished
89	HS23071051-02	GB3	Unknown		26/Jul/23 17:26:02	Finished
90	HS23071051-02DF20	GB4	Unknown		26/Jul/23 17:31:49	Finished
91	HS23071051-03	GB5	Unknown		26/Jul/23 17:37:47	Finished
92	HS23071051-03DF10	GB6	Unknown		26/Jul/23 17:43:35	Finished
93	CCV1	R3	Unknown		26/Jul/23 18:18:18	Finished
94	CCB	R7	Unknown		26/Jul/23 18:24:06	Finished
95	HS23071592-02	GD1	Unknown		26/Jul/23 18:35:51	Finished
96	HS23071592-03	GD2	Unknown		26/Jul/23 18:41:39	Finished
97	HS23071592-04	GD3	Unknown		26/Jul/23 18:47:26	Finished
98	HS23071592-05	GD4	Unknown		26/Jul/23 18:53:13	Finished

99	HS23071592-06	GD5	Unknown		26/Jul/23 18:59:01	Finished
100	HS23071592-07	GD6	Unknown		26/Jul/23 19:04:48	Finished
101	HS23071592-07MS	GD7	Unknown		26/Jul/23 19:10:35	Finished
102	HS23071592-07MSD	GD8	Unknown		26/Jul/23 19:16:22	Finished
103	HS23071592-08	GE1	Unknown		26/Jul/23 19:22:10	Finished
104	HS23071592-09	GE2	Unknown		26/Jul/23 19:27:57	Finished
105	CCV	R1	Unknown		26/Jul/23 19:51:06	Finished
106	CCB	R4	Unknown		26/Jul/23 20:02:41	Finished
107	HS23071594-01	GE3	Unknown		26/Jul/23 20:08:28	Finished
108	HS23071594-01MS	GE4	Unknown		26/Jul/23 20:14:15	Finished
109	HS23071594-01MSD	GE5	Unknown		26/Jul/23 20:20:03	Finished
110	HS23071489-01DF20	GE6	Unknown		26/Jul/23 20:25:50	Finished
111	HS23071582-01	GE7	Unknown		26/Jul/23 20:31:37	Finished
112	HS23071582-01DF10	GE8	Unknown		26/Jul/23 20:37:25	Finished
113	MBLK	R5	Unknown		26/Jul/23 21:00:33	Finished
114	LCS	R2	Unknown		26/Jul/23 21:12:08	Finished
115	CCV1	R3	Unknown		26/Jul/23 21:23:43	Finished
116	CCB	R7	Unknown		26/Jul/23 21:29:30	Finished
117	HS23071594-02DF5	BA1	Unknown		26/Jul/23 21:41:16	Finished
118	HS23071594-02MSD	BA2	Unknown		26/Jul/23 21:47:03	Finished
119	HS23071594-02MSD	BA3	Unknown		26/Jul/23 21:52:50	Finished
120	HS23071607-01DF10	BA4	Unknown		26/Jul/23 21:58:38	Finished
121	HS23071607-02DF10	BA5	Unknown		26/Jul/23 22:04:25	Finished
122	HS23071607-03DF10	BA6	Unknown		26/Jul/23 22:10:12	Finished
123	HS23071607-01DF20	BA7	Unknown		26/Jul/23 22:15:59	Finished
124	HS23071607-02DF20	BA8	Unknown		26/Jul/23 22:21:47	Finished
125	HS23071607-03DF20	BB1	Unknown		26/Jul/23 22:27:34	Finished
126	CCV	R1	Unknown		26/Jul/23 22:56:30	Finished
127	CCB	R6	Unknown		26/Jul/23 23:02:17	Finished
128	HS23071595-02	BB2	Unknown		26/Jul/23 23:13:51	Finished
129	HS23071595-03	BB3	Unknown		26/Jul/23 23:19:38	Finished
130	HS23071595-03MS	BB4	Unknown		26/Jul/23 23:25:26	Finished
131	HS23071595-03MSD	BB5	Unknown		26/Jul/23 23:31:13	Finished
132	HS23071595-04	BB6	Unknown		26/Jul/23 23:37:00	Finished
133	HS23071595-05	BB7	Unknown		26/Jul/23 23:42:48	Finished
134	HS23071595-06	BB8	Unknown		26/Jul/23 23:48:35	Finished
135	HS23071595-07	BC1	Unknown		26/Jul/23 23:54:22	Finished
136	HS23071595-08	BC2	Unknown		27/Jul/23 00:00:09	Finished
137	HS23071595-09	BC3	Unknown		27/Jul/23 00:05:57	Finished
138	CCV1	R3	Unknown		27/Jul/23 00:34:53	Finished
139	CCB	R7	Unknown		27/Jul/23 00:40:40	Finished
140	HS23071595-10	BC4	Unknown		27/Jul/23 00:52:14	Finished
141	HS23071595-11	BC5	Unknown		27/Jul/23 00:58:02	Finished
142	HS23071595-12	BC6	Unknown		27/Jul/23 01:03:49	Finished
143	MBLK	R5	Unknown		27/Jul/23 01:26:58	Finished
144	LCS	R2	Unknown		27/Jul/23 01:44:20	Finished
145	HS23071235-01	BC7	Unknown		27/Jul/23 01:50:07	Finished
146	HS23071235-01MS	BC8	Unknown		27/Jul/23 01:55:54	Finished
147	HS23071235-01MSD	BD1	Unknown		27/Jul/23 02:01:41	Finished
148	HS23071235-01DF10	BD2	Unknown		27/Jul/23 02:07:28	Finished
149	CCV	R1	Unknown		27/Jul/23 02:36:25	Finished
150	CCB	R4	Unknown		27/Jul/23 02:42:12	Finished
151	HS23071235-02	BD3	Unknown		27/Jul/23 02:53:47	Finished
152	HS23071235-02DF10	BD4	Unknown		27/Jul/23 02:59:34	Finished
153	HS23071235-03	BD5	Unknown		27/Jul/23 03:05:21	Finished
154	HS23071235-03DF10	BD6	Unknown		27/Jul/23 03:11:08	Finished

155	HS23071235-04	BD7	Unknown		27/Jul/23 03:16:56	Finished
156	HS23071235-04DF10	BD8	Unknown		27/Jul/23 03:22:43	Finished
157	HS23071235-05	BE1	Unknown		27/Jul/23 03:28:30	Finished
158	HS23071235-05DF10	BE2	Unknown		27/Jul/23 03:34:17	Finished
159	HS23071456-01DF2	BE3	Unknown		27/Jul/23 03:40:05	Finished
160	HS23071456-01DF40	BE4	Unknown		27/Jul/23 03:45:52	Finished
161	CCV1	R3	Unknown		27/Jul/23 04:09:01	Finished
162	CCB	R7	Unknown		27/Jul/23 04:14:48	Finished
163	HS23071588-01DF2	BE5	Unknown		27/Jul/23 04:26:22	Finished
164	HS23071588-01DF20	BE6	Unknown		27/Jul/23 04:32:10	Finished
165	HS23071588-02DF2	BE7	Unknown		27/Jul/23 04:37:57	Finished
166	HS23071588-02DF20	BE8	Unknown		27/Jul/23 04:43:44	Finished
167	HS23071588-03DF2	RA1	Unknown		27/Jul/23 04:49:42	Finished
168	HS23071588-03DF20	RA2	Unknown		27/Jul/23 04:55:29	Finished
169	HS23071597-07	RA3	Unknown		27/Jul/23 05:01:16	Finished
170	HS23071597-07DF10	RA4	Unknown		27/Jul/23 05:07:03	Finished
171	CCV	R1	Unknown		27/Jul/23 05:35:58	Finished
172	CCB	R6	Unknown		27/Jul/23 05:41:45	Finished
173	MBLK-198037	R5	Unknown		27/Jul/23 05:53:19	Finished
174	LCS-198037	R2	Unknown		27/Jul/23 06:04:53	Finished
175	HS23071102-01	RA5	Unknown		27/Jul/23 06:10:40	Finished
176	HS23071102-01MS	RA6	Unknown		27/Jul/23 06:16:28	Finished
177	HS23071102-01MSD	RA7	Unknown		27/Jul/23 06:22:15	Finished
178	HS23071102-03	RA8	Unknown		27/Jul/23 06:28:02	Finished
179	HS23071102-05	RB1	Unknown		27/Jul/23 06:33:49	Finished
180	HS23071102-07	RB2	Unknown		27/Jul/23 06:39:36	Finished
181	HS23071102-09	RB3	Unknown		27/Jul/23 06:45:23	Finished
182	HS23071102-11	RB4	Unknown		27/Jul/23 06:51:10	Finished
183	CCV1	R3	Unknown		27/Jul/23 07:08:31	Finished
184	CCB	R7	Unknown		27/Jul/23 07:14:18	Finished
185	HS23071102-13	RB5	Unknown		27/Jul/23 07:25:53	Finished
186	HS23071102-15	RB6	Unknown		27/Jul/23 07:31:40	Finished
187	HS23071296-01	RB7	Unknown		27/Jul/23 07:37:27	Finished
188	HS23071296-02	RB8	Unknown		27/Jul/23 07:43:14	Finished
189	HS23071296-03	RC1	Unknown		27/Jul/23 07:49:01	Finished
190	HS23071296-04	RC2	Unknown		27/Jul/23 07:54:48	Finished
191	HS23071296-05	RC3	Unknown		27/Jul/23 08:00:47	Finished
192	HS23071296-06	RC4	Unknown		27/Jul/23 08:06:34	Finished
193	HS23071296-07	RC5	Unknown		27/Jul/23 08:12:21	Finished
194	CCV	R1	Unknown		27/Jul/23 08:29:42	Finished
195	CCB	R6	Unknown		27/Jul/23 08:35:29	Finished
196	HS23071296-08	RC6	Unknown		27/Jul/23 08:47:04	Finished
197	HS23071296-09	RC7	Unknown		27/Jul/23 08:52:51	Finished
198	HS23071296-10	RC8	Unknown		27/Jul/23 08:58:38	Finished
199	HS23071296-11	RD1	Unknown		27/Jul/23 09:04:25	Finished
200	HS23071296-12	RD2	Unknown		27/Jul/23 09:10:12	Finished
201	CCV1	R3	Unknown		27/Jul/23 09:33:21	Finished
202	CCB	R7	Unknown		27/Jul/23 09:39:09	Finished
203	MBLK-198060	R5	Unknown		27/Jul/23 09:44:56	Finished
204	LCS-198060	R2	Unknown		27/Jul/23 09:56:08	Finished
205	HS23070895-01	RD3	Unknown		27/Jul/23 10:01:55	Finished
206	HS23070895-01MSD	RD4	Unknown		27/Jul/23 10:07:42	Finished
207	HS23070895-01MS	RD5	Unknown		27/Jul/23 10:13:30	Finished
208	HS23071296-13	RD6	Unknown		27/Jul/23 10:19:17	Finished
209	HS23071595-06DF20	BB8	Unknown		27/Jul/23 10:30:51	Finished
210	CCV	R1	Unknown		27/Jul/23 10:42:26	Finished

211	CCB	R4	Unknown		27/Jul/23 10:54:01	Finished
212	HS23070895-02	RD7	Unknown		27/Jul/23 10:59:48	Finished
213	HS23070895-03	RD8	Unknown		27/Jul/23 11:05:35	Finished
214	HS23070895-04	RE1	Unknown		27/Jul/23 11:11:22	Finished
215	HS23070895-05	RE2	Unknown		27/Jul/23 11:17:10	Finished
216	HS23070895-06	RE3	Unknown		27/Jul/23 11:22:57	Finished
217	HS23071409-01	RE4	Unknown		27/Jul/23 11:28:44	Finished
218	HS23071409-02	RE5	Unknown		27/Jul/23 11:34:31	Finished
219	HS23071409-03	RE6	Unknown		27/Jul/23 11:40:19	Finished
220	HS23071409-04	RE7	Unknown		27/Jul/23 11:46:06	Finished
221	HS23071409-05	RE8	Unknown		27/Jul/23 11:51:53	Finished
222	CCV1	R3	Unknown		27/Jul/23 12:03:28	Finished
223	CCB	R7	Unknown		27/Jul/23 12:09:15	Finished
224	HS23071409-06	GA1	Unknown		27/Jul/23 12:21:01	Finished
225	HS23071409-07	GA2	Unknown		27/Jul/23 12:26:48	Finished
226	HS23071409-08	GA3	Unknown		27/Jul/23 12:32:35	Finished
227	HS23071409-09	GA4	Unknown		27/Jul/23 12:38:23	Finished
228	HS23071409-10	GA5	Unknown		27/Jul/23 12:44:10	Finished
229	HS23071409-11	GA6	Unknown		27/Jul/23 12:49:57	Finished
230	HS23071409-12	GA7	Unknown		27/Jul/23 12:55:45	Finished
231	HS23071409-13	GA8	Unknown		27/Jul/23 13:01:32	Finished
232	CCV	R1	Unknown		27/Jul/23 13:18:54	Finished
233	CCB	R6	Unknown		27/Jul/23 13:24:41	Finished
234	MBLK	R5	Unknown		27/Jul/23 13:36:15	Finished
235	LCS	R2	Unknown		27/Jul/23 13:47:50	Finished
236	HS23071694-01	GB1	Unknown		27/Jul/23 13:53:37	Finished
237	HS23071694-01MS	GB2	Unknown		27/Jul/23 13:59:25	Finished
238	HS23071694-01MSD	GB3	Unknown		27/Jul/23 14:05:12	Finished
239	HS23071694-01DF10	GB4	Unknown		27/Jul/23 14:10:59	Finished
240	HS23071610-01DF20	GB5	Unknown		27/Jul/23 14:16:46	Finished
241	HS23071610-01DF40	GB6	Unknown		27/Jul/23 14:22:34	Finished
242	CCV1	R3	Unknown		27/Jul/23 14:39:55	Finished
243	CCB	R7	Unknown		27/Jul/23 14:45:42	Finished
244	HS23071715-01	GB7	Unknown		27/Jul/23 15:20:37	Finished
245	HS23071715-01DF10	GB8	Unknown		27/Jul/23 15:26:25	Finished
246	HS23071260-01	GC1	Unknown		27/Jul/23 15:56:51	Finished
247	HS23071260-01MS	GC2	Unknown		27/Jul/23 16:02:38	Finished
248	HS23071260-01MSD	GC3	Unknown		27/Jul/23 16:08:25	Finished
249	HS23071260-01DF10	GC4	Unknown		27/Jul/23 16:14:12	Finished
250	HS23071260-04	GC5	Unknown		27/Jul/23 16:20:00	Finished
251	HS23071260-04DF5	GC6	Unknown		27/Jul/23 16:25:47	Finished
252	HS23071260-05	GC7	Unknown		27/Jul/23 16:31:34	Finished
253	HS23071260-05DF5	GC8	Unknown		27/Jul/23 16:37:21	Finished
254	CCV	R1	Unknown		27/Jul/23 17:00:30	Finished
255	CCB	R6	Unknown		27/Jul/23 17:06:18	Finished
256	HS23071260-06	GD1	Unknown		27/Jul/23 17:17:52	Finished
257	HS23071260-06DF5	GD2	Unknown		27/Jul/23 17:23:51	Finished
258	HS23071260-07	GD3	Unknown		27/Jul/23 17:29:49	Finished
259	HS23071260-07DF5	GD4	Unknown		27/Jul/23 17:35:37	Finished
260	HS23071260-08	GD5	Unknown		27/Jul/23 17:41:24	Finished
261	HS23071260-08DF5	GD6	Unknown		27/Jul/23 17:47:11	Finished
262	HS23071260-09	GD7	Unknown		27/Jul/23 17:52:58	Finished
263	HS23071260-09DF5	GD8	Unknown		27/Jul/23 17:58:46	Finished
264	HS23071260-10	GE1	Unknown		27/Jul/23 18:04:33	Finished
265	HS23071260-10DF5	GE2	Unknown		27/Jul/23 18:10:20	Finished
266	CCV1	R3	Unknown		27/Jul/23 18:27:42	Finished

267	CCB	R7	Unknown		27/Jul/23 18:33:29	Finished
268	HS23071260-11	GE3	Unknown		27/Jul/23 18:45:04	Finished
269	HS23071260-11DF10	GE4	Unknown		27/Jul/23 18:50:51	Finished
270	HS23071260-12	GE5	Unknown		27/Jul/23 18:56:39	Finished
271	HS23071260-12DF10	GE6	Unknown		27/Jul/23 19:02:26	Finished
272	HS23071260-13	GE7	Unknown		27/Jul/23 19:08:13	Finished
273	HS23071260-13DF10	GE8	Unknown		27/Jul/23 19:14:01	Finished
274	HS23071403-01	BA1	Unknown		27/Jul/23 19:19:59	Finished
275	HS23071403-01DF10	BA2	Unknown		27/Jul/23 19:25:46	Finished
276	HS23071598-01DF2	BA3	Unknown		27/Jul/23 19:31:34	Finished
277	HS23071598-01DF50	BA4	Unknown		27/Jul/23 19:37:21	Finished
278	CCV	R1	Unknown		27/Jul/23 20:12:04	Finished
279	CCB	R6	Unknown		27/Jul/23 20:17:51	Finished

Sequence: 072523
Injection #6: STD6

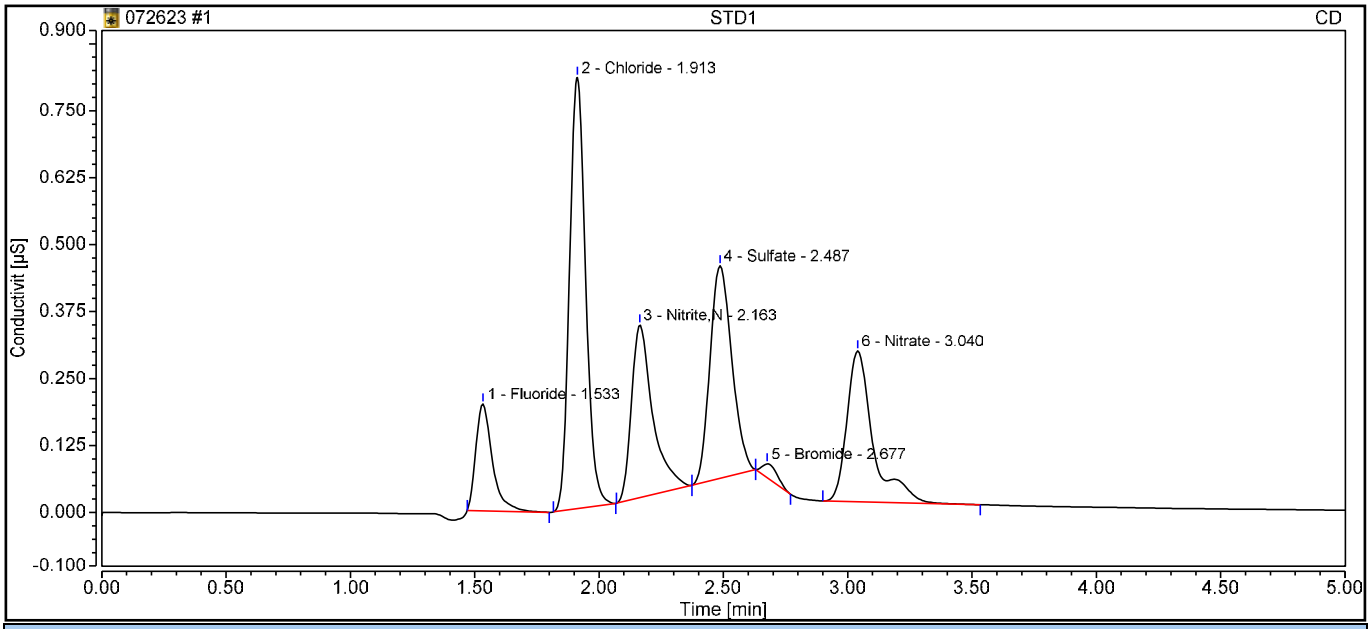
Calibration

Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***12.2533***	***0.99930***	***-0.0063***	***0.2209***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.4521	0.99994	-0.0189	0.1525	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	6.9387	0.99976	-0.0019	0.3401	-0.0042
4	Sulfate	Lin, WithOffset, 1/A	Area	6	4.7178	0.99989	-0.0106	0.0975	0.0000
5	Bromide	Lin, WithOffset, 1/A	Area	6	31.1653	0.99655	-0.0032	0.0403	0.0000
6	Nitrate	Lin, WithOffset, 1/A	Area	6	4.1069	0.99991	0.0004	0.3148	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	5	7.5941	0.99929	-0.0010	0.0074	-0.0001
n.a.	Phosphate	Lin, WithOffset, 1/A	Area	0	n.a.	n.a.	n.a.	n.a.	n.a.
Maximum					**31.1653**	0.99994			
Minimum					3.4521	**0.99655**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**BA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 16:37**	*Sample Weight:*	**1.0000**

Run Time:



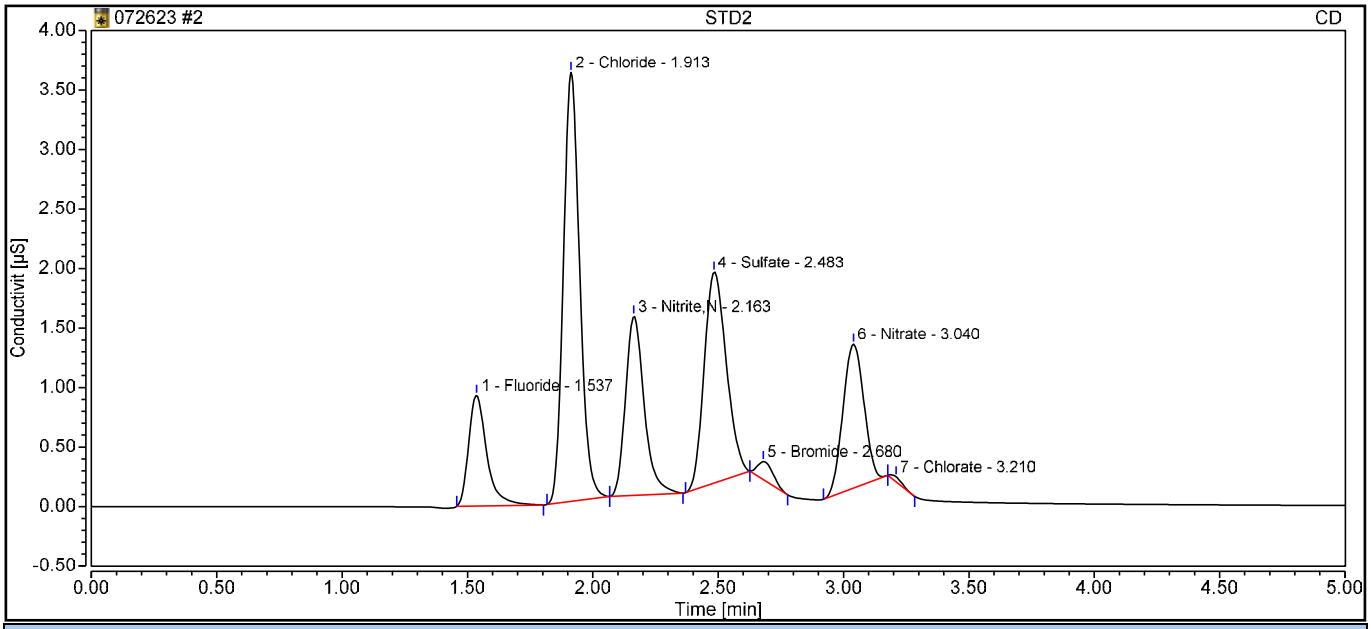
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.53	Fluoride	BMB	0.015	0.0982	0.0982	1.0000
2	1.91	Chloride	BMB	0.060	0.5201	0.5201	1.0000
3	2.16	Nitrite,N	BMB	0.032	0.0998	0.0998	1.0000
4	2.49	Sulfate	BMB	0.040	0.5235	0.5235	1.0000
5	2.68	Bromide	BMB	0.002	0.1282	0.1282	1.0000
6	3.04	Nitrate	BMB	0.034	0.1076	0.1076	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.185**		**1.48**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**BA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 16:42**	*Sample Weight:*	**1.0000**

Run Time:

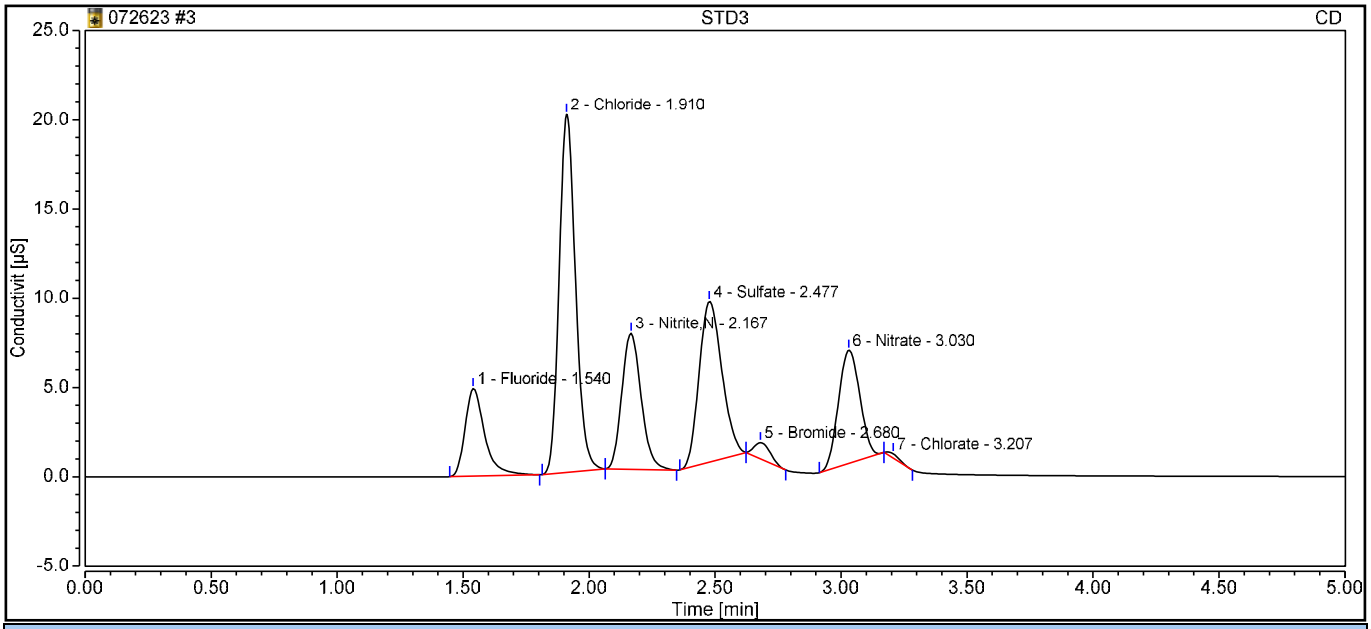


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.078	0.3827	0.3827	1.0000
2	1.91	Chloride	BMB	0.271	1.8981	1.8981	1.0000
3	2.16	Nitrite,N	BMB	0.130	0.3902	0.3902	1.0000
4	2.48	Sulfate	BMB	0.182	1.9704	1.9704	1.0000
5	2.68	Bromide	BMB	0.011	0.3570	0.3570	1.0000
6	3.04	Nitrate	BMB	0.117	0.3714	0.3714	1.0000
7	3.21	Chlorate	BMB	0.002	0.4099	0.4099	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.791**		**5.78**	

3 STD3			
Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**BA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 16:48**	*Sample Weight:*	**1.0000**

Run Time:



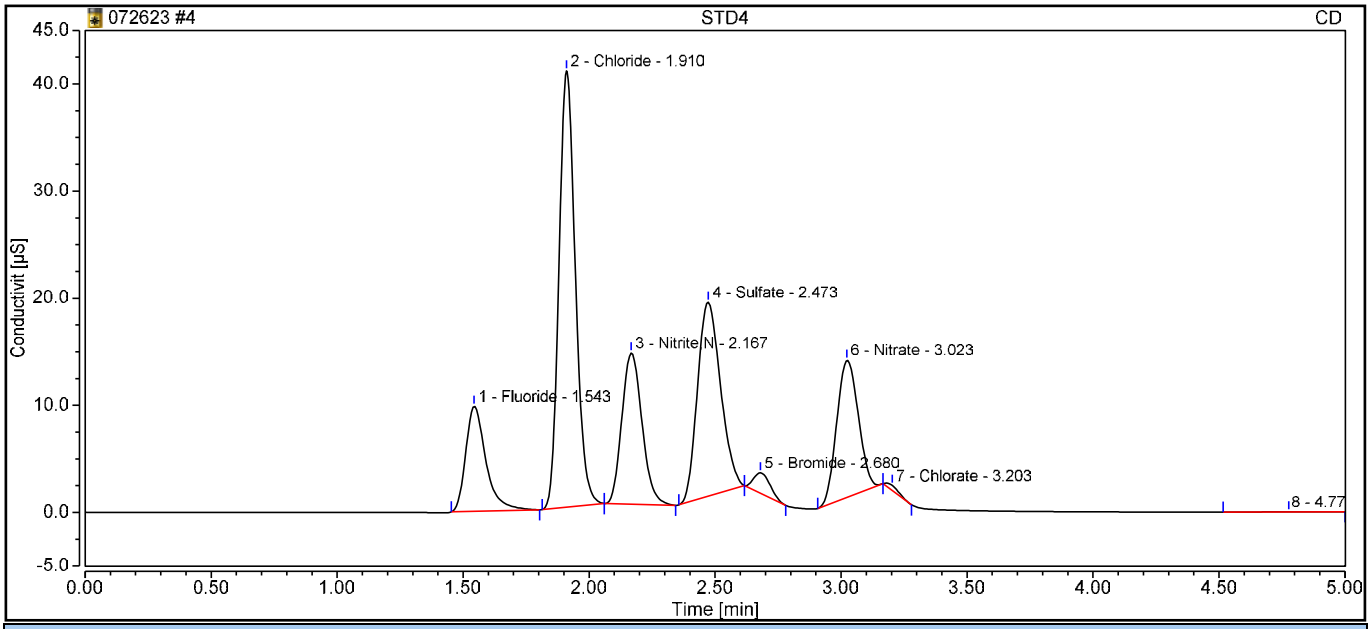
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.443	2.0321	2.0321	1.0000
2	1.91	Chloride	BMB	1.507	10.0077	10.0077	1.0000
3	2.17	Nitrite,N	BMB	0.678	2.0522	2.0522	1.0000
4	2.48	Sulfate	BMB	0.941	9.7558	9.7558	1.0000
5	2.68	Bromide	BMB	0.069	1.7813	1.7813	1.0000
6	3.03	Nitrate	BMB	0.623	1.9777	1.9777	1.0000
7	3.21	Chlorate	BMB	0.013	1.9777	1.9777	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.274**		**29.58**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**BA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 16:54**	*Sample Weight:*	**1.0000**

Run Time:



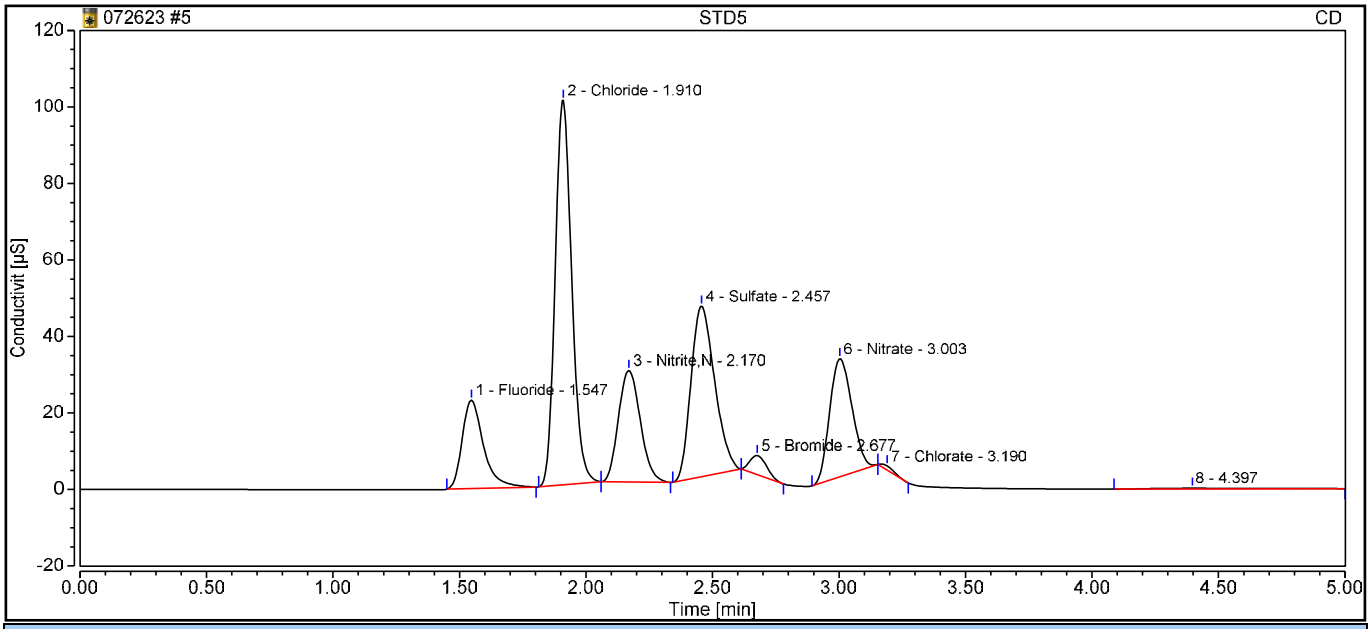
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.914	4.1659	4.1659	1.0000
2	1.91	Chloride	BMB	3.070	20.2555	20.2555	1.0000
3	2.17	Nitrite,N	BMB	1.312	4.0672	4.0672	1.0000
4	2.47	Sulfate	BMB	1.924	19.8386	19.8386	1.0000
5	2.68	Bromide	BMB	0.147	3.7234	3.7234	1.0000
6	3.02	Nitrate	BMB	1.267	4.0238	4.0238	1.0000
7	3.20	Chlorate	BMB	0.025	3.8476	3.8476	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.659**		**59.92**	

5 STD5

Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**BA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 17:00**	*Sample Weight:*	**1.0000**

Run Time:

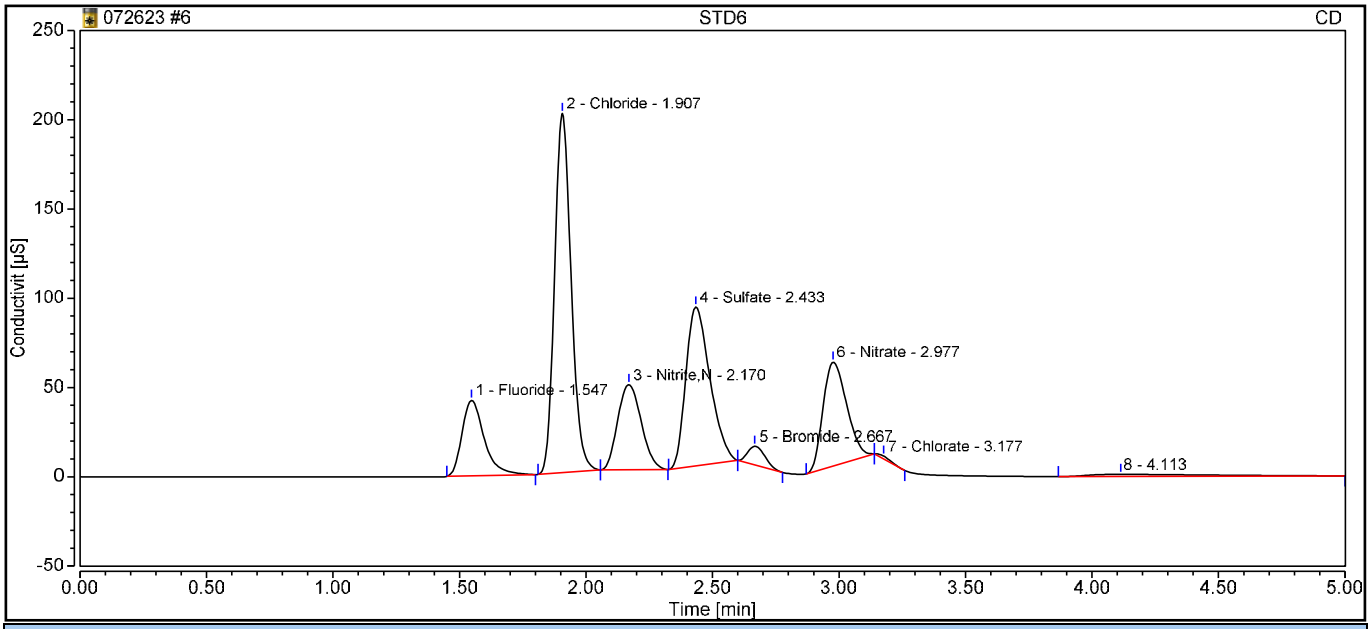


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	2.258	10.2496	10.2496	1.0000
2	1.91	Chloride	BMB	7.592	49.9067	49.9067	1.0000
3	2.17	Nitrite,N	BMB	2.921	9.7793	9.7793	1.0000
4	2.46	Sulfate	BMB	4.828	49.6172	49.6172	1.0000
5	2.68	Bromide	BMB	0.383	9.5759	9.5759	1.0000
6	3.00	Nitrate	BMB	3.147	9.9972	9.9972	1.0000
7	3.19	Chlorate	BMB	0.060	10.3723	10.3723	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**21.190**		**149.50**	

6	*STD6*		
Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**BA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 17:06**	*Sample Weight:*	**1.0000**

Run Time:



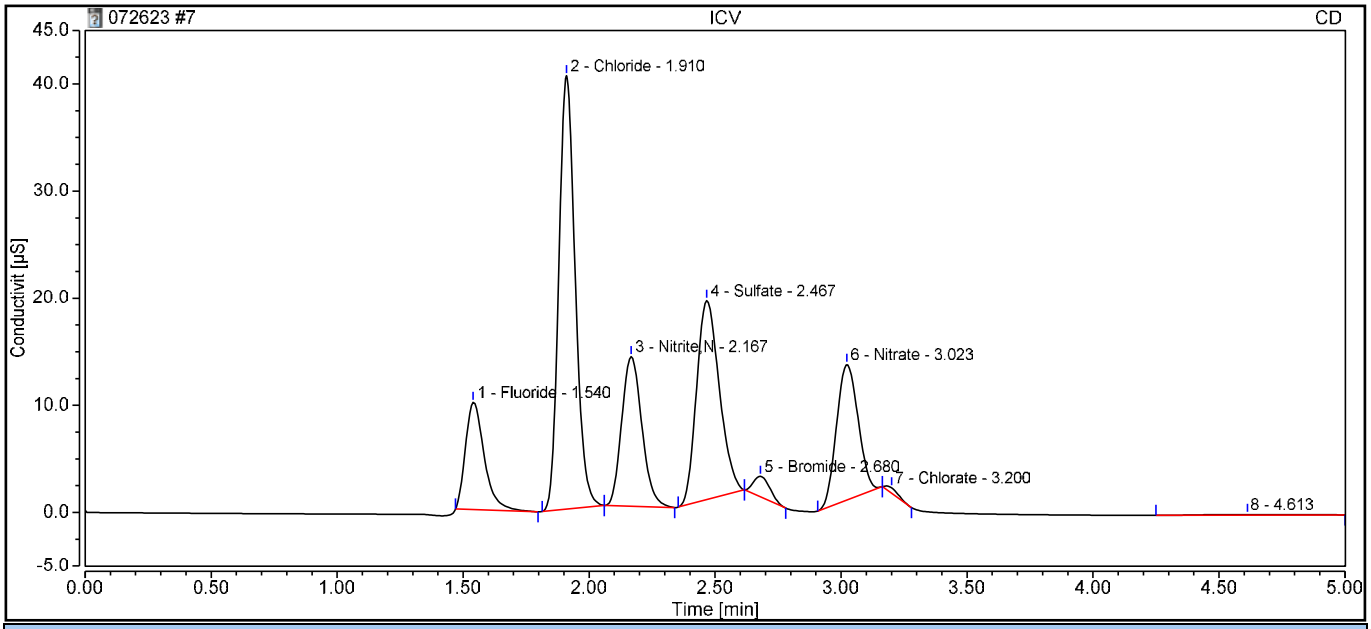
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	4.317	19.5714	19.5714	1.0000
2	1.91	Chloride	BMB	15.218	99.9119	99.9119	1.0000
3	2.17	Nitrite,N	BMB	5.138	20.1322	20.1322	1.0000
4	2.43	Sulfate	BMB	9.819	100.7945	100.7945	1.0000
5	2.67	Bromide	BMB	0.840	20.9342	20.9342	1.0000
6	2.98	Nitrate	BMB	6.303	20.0223	20.0223	1.0000
7	3.18	Chlorate	BMB	0.089	19.6278	19.6278	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**41.724**		**300.99**	

7 ICV

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**BA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 17:12**	*Sample Weight:*	**1.0000**

Run Time:



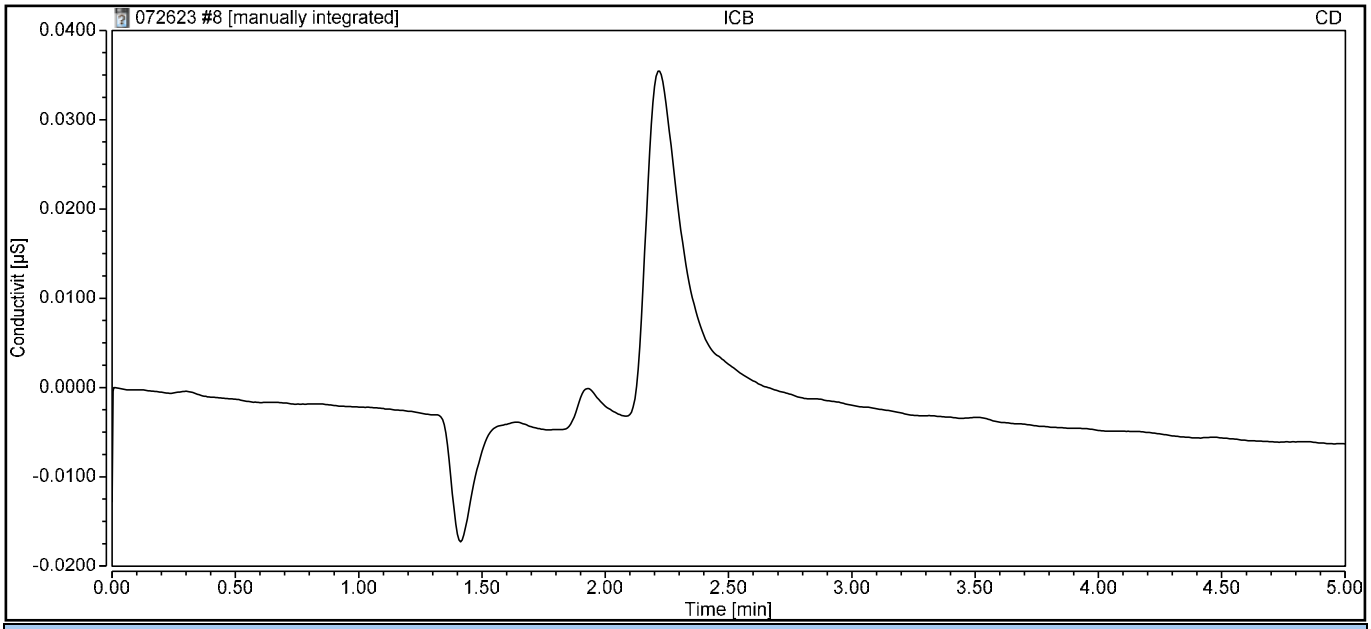
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.869	3.9631	3.9631	1.0000
2	1.91	Chloride	BMB	3.054	20.1478	20.1478	1.0000
3	2.17	Nitrite,N	BMB	1.298	4.0237	4.0237	1.0000
4	2.47	Sulfate	BMB	1.947	20.0694	20.0694	1.0000
5	2.68	Bromide	BMB	0.148	3.7586	3.7586	1.0000
6	3.02	Nitrate	BMB	1.257	3.9913	3.9913	1.0000
7	3.20	Chlorate	BMB	0.028	4.3066	4.3066	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.601**		**60.26**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**BA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/22/2023 17:41**	*Sample Weight:*	**1.0000**

Run Time:



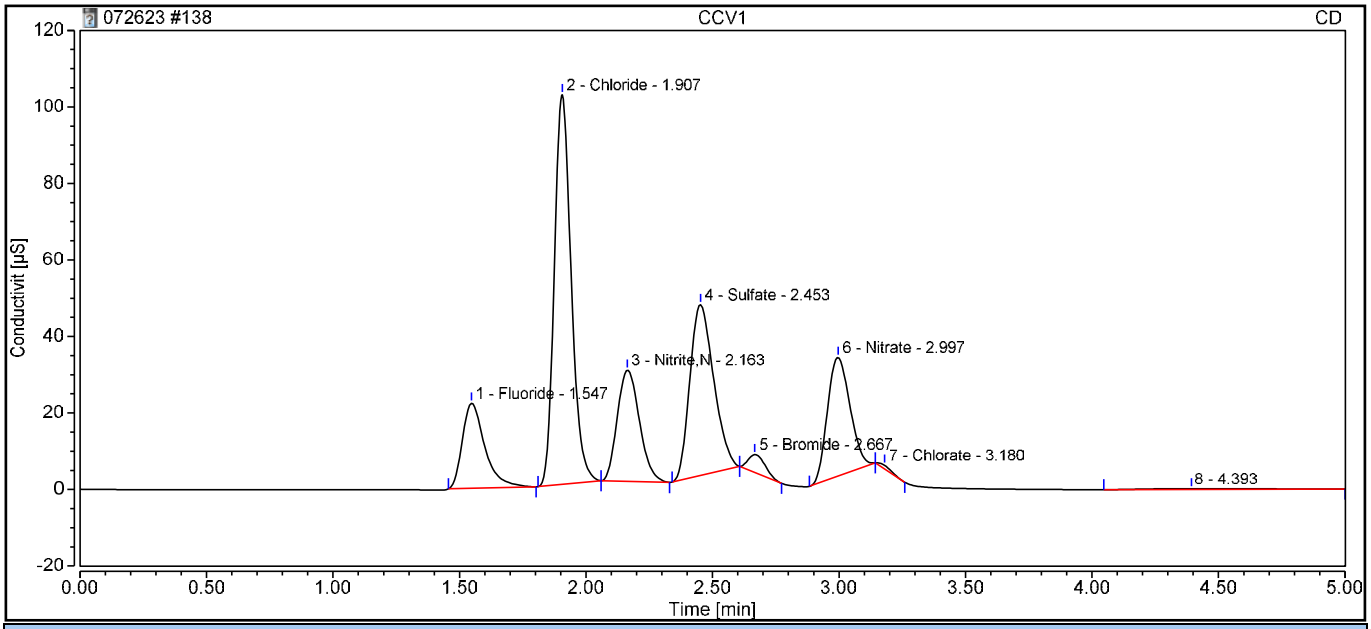
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

138 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 00:34**	*Sample Weight:*	**1.0000**

Run Time:



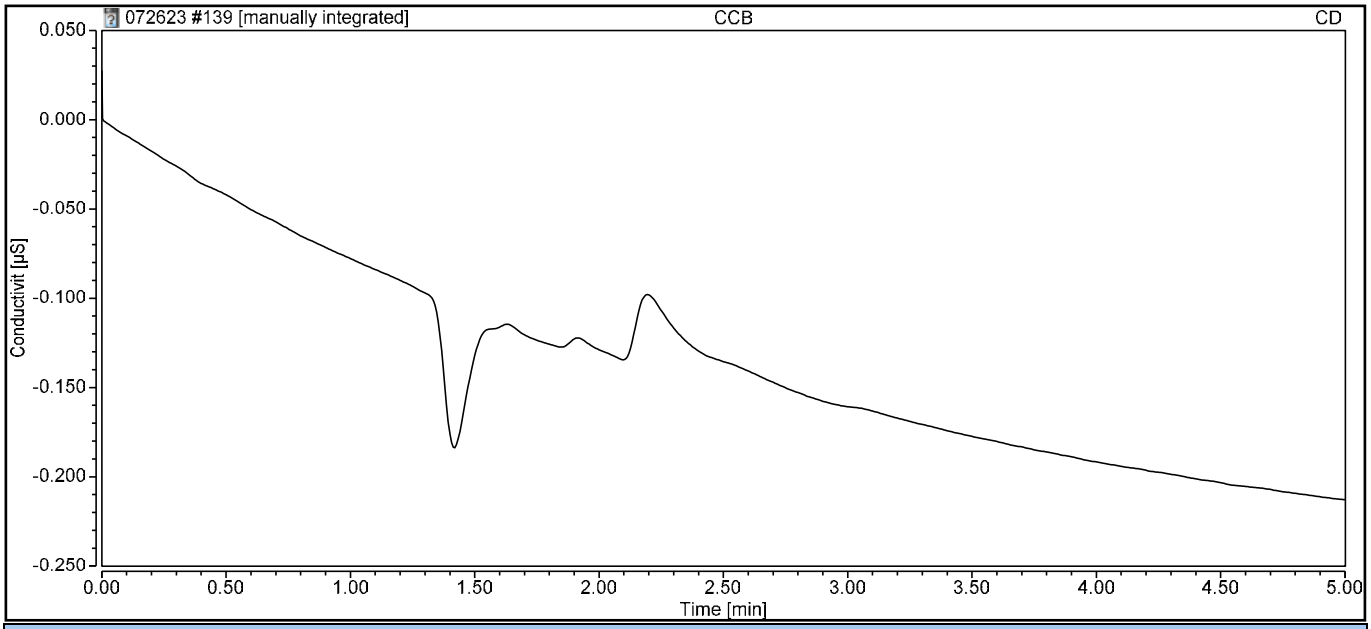
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	2.294	10.4127	10.4127	1.0000
2	1.91	Chloride	BMB	7.852	51.6115	51.6115	1.0000
3	2.16	Nitrite,N	BMB	2.952	9.8986	9.8986	1.0000
4	2.45	Sulfate	BMB	4.882	50.1667	50.1667	1.0000
5	2.67	Bromide	BMB	0.372	9.3029	9.3029	1.0000
6	3.00	Nitrate	BMB	3.209	10.1921	10.1921	1.0000
7	3.18	Chlorate	BMB	0.054	8.9848	8.9848	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**21.614**		**150.57**	

139 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 00:40**	*Sample Weight:*	**1.0000**

Run Time:



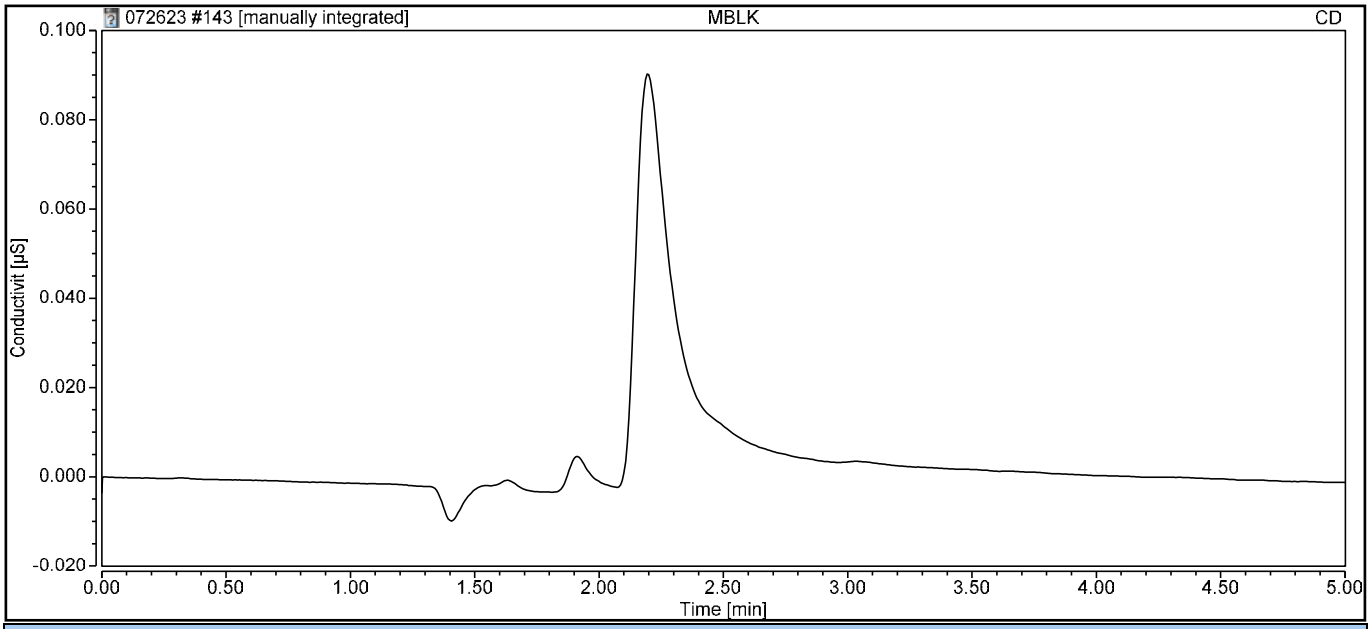
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

143 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 01:26**	*Sample Weight:*	**1.0000**

Run Time:



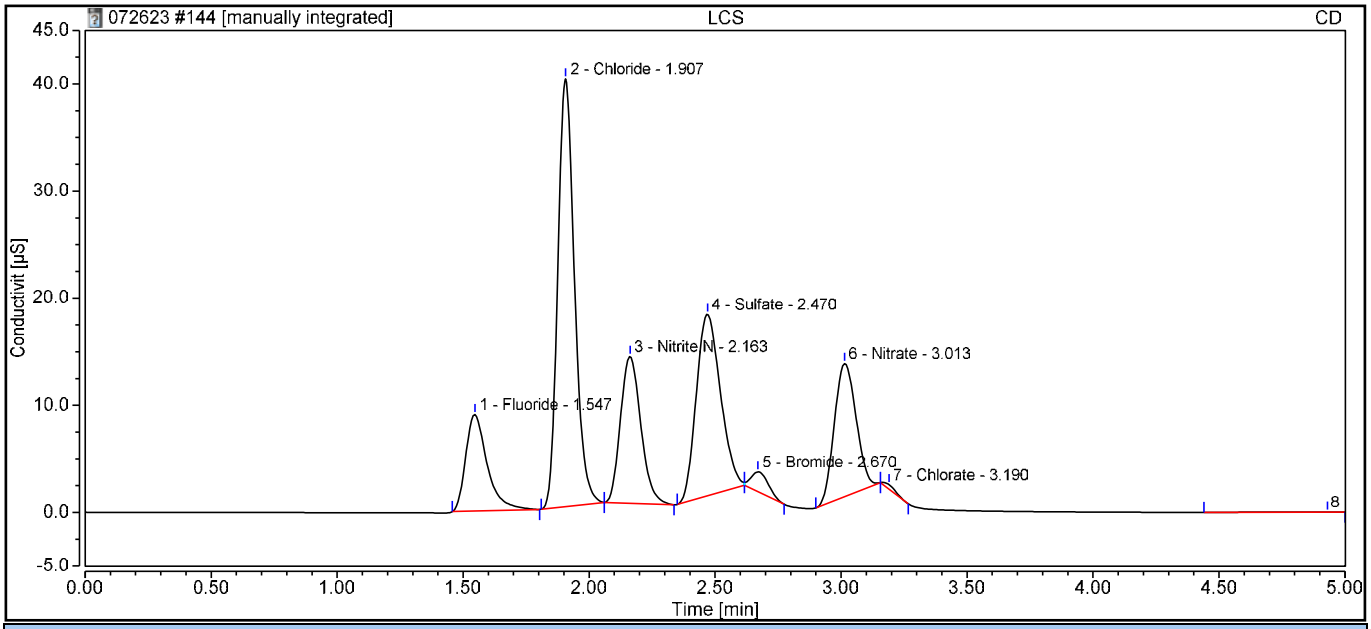
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

144 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**R2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 01:44**	*Sample Weight:*	**1.0000**

Run Time:



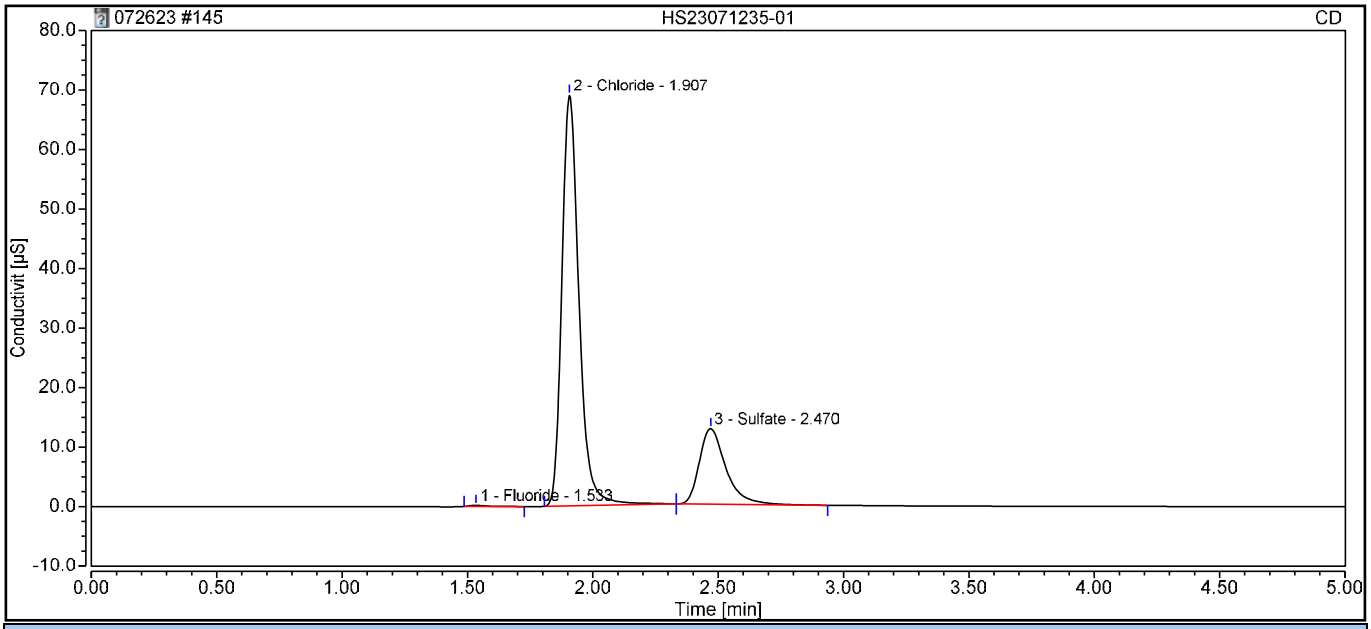
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.891	4.0600	4.0600	1.0000
2	1.91	Chloride	BMB	3.064	20.2169	20.2169	1.0000
3	2.16	Nitrite,N	BMB	1.285	3.9799	3.9799	1.0000
4	2.47	Sulfate	BM *	1.889	19.4751	19.4751	1.0000
5	2.67	Bromide	MB*	0.150	3.8141	3.8141	1.0000
6	3.01	Nitrate	BMB	1.245	3.9528	3.9528	1.0000
7	3.19	Chlorate	BMB	0.022	3.2440	3.2440	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.545**		**58.74**	

145 HS23071235-01

Sample Name:	**HS23071235-01**	*Injection Volume:*	**5.00**
Vial Number:	**BC7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 01:50**	*Sample Weight:*	**1.0000**

Run Time:



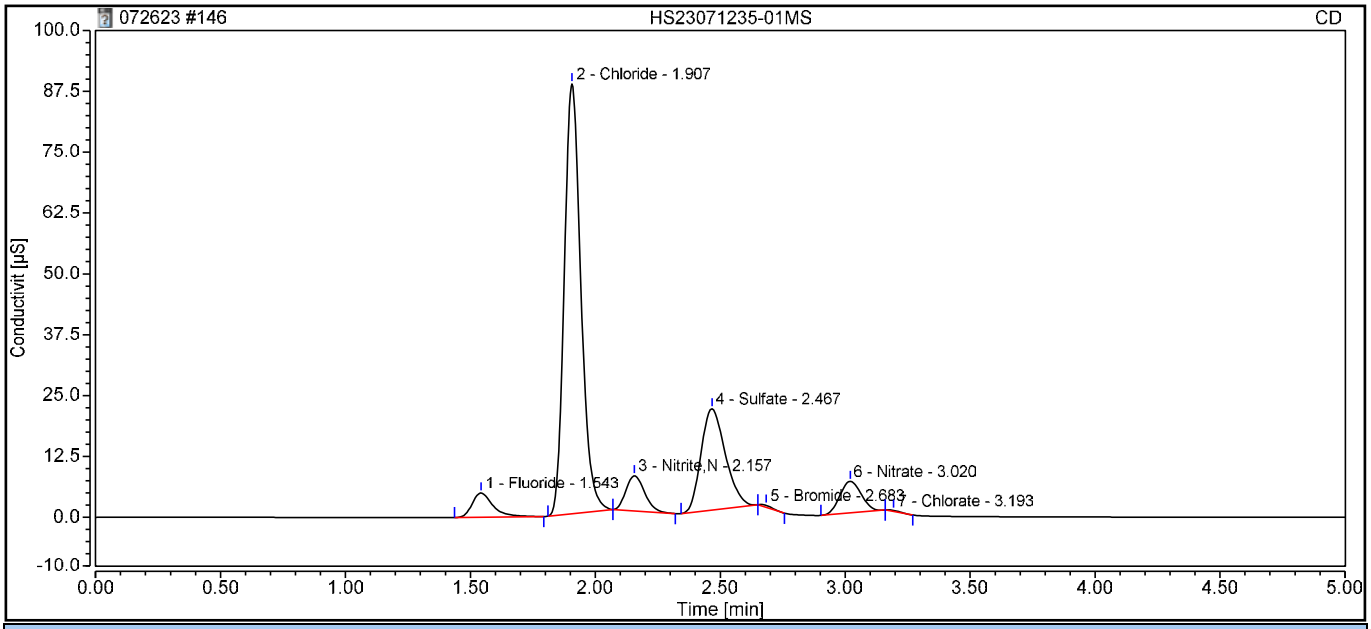
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.53	Fluoride	BMB	0.013	0.0890	0.0890	1.0000
2	1.91	Chloride	BMB	5.452	35.8717	35.8717	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
3	2.47	Sulfate	BMB	1.557	16.0692	16.0692	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**7.022**		**52.03**	

146 HS23071235-01MS

Sample Name:	**HS23071235-01MS**	*Injection Volume:*	**5.00**
Vial Number:	**BC8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 01:55**	*Sample Weight:*	**1.0000**

Run Time:



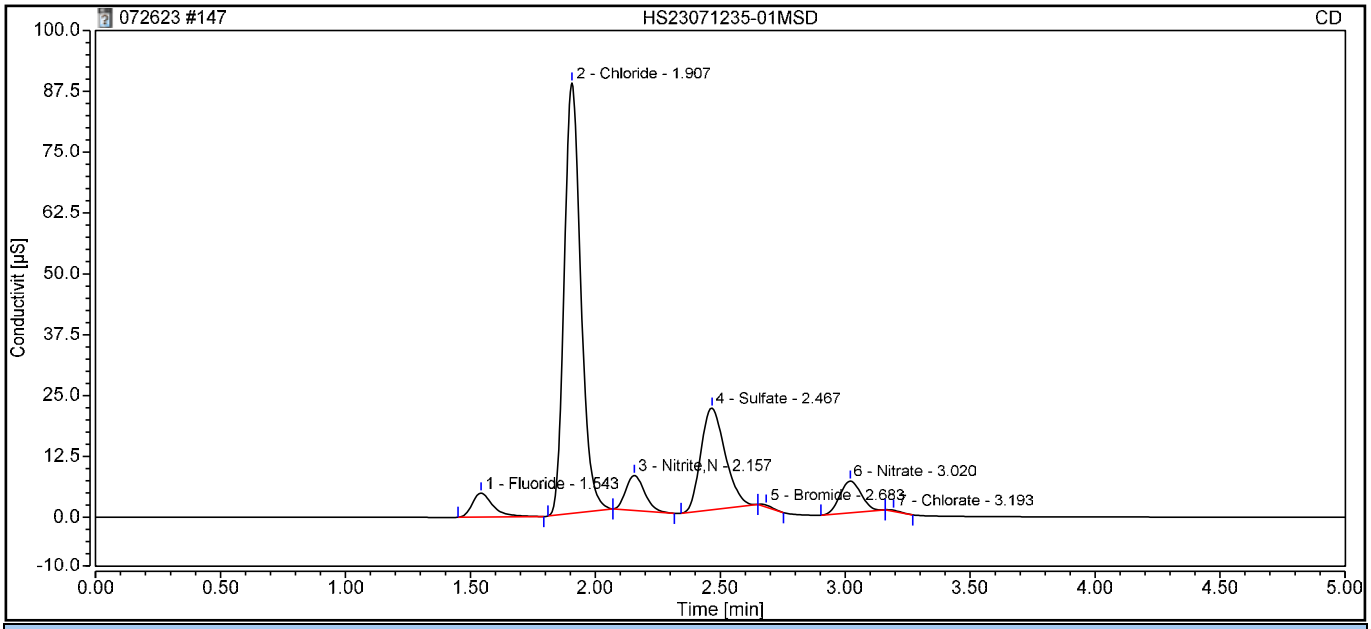
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.483	2.2130	2.2130	1.0000
2	1.91	Chloride	BMB	6.793	44.6644	44.6644	1.0000
3	2.16	Nitrite,N	BMB	0.626	1.8915	1.8915	1.0000
4	2.47	Sulfate	BMB	2.344	24.1459	24.1459	1.0000
5	2.68	Bromide	BMB	0.021	0.5946	0.5946	1.0000
6	3.02	Nitrate	BMB	0.641	2.0357	2.0357	1.0000
7	3.19	Chlorate	BMB	0.011	1.7317	1.7317	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**10.919**		**77.28**	

147 HS23071235-01MSD

Sample Name:	**HS23071235-01MSD**	*Injection Volume:*	**5.00**
Vial Number:	**BD1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 02:01**	*Sample Weight:*	**1.0000**

Run Time:



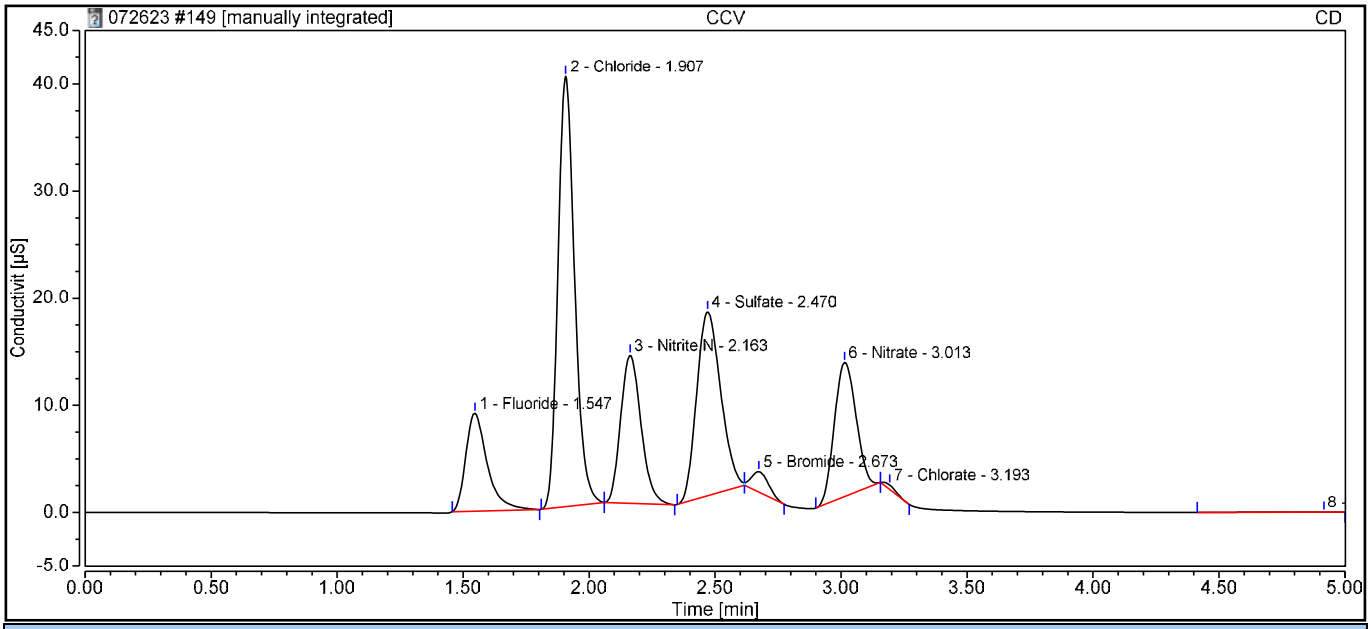
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.475	2.1776	2.1776	1.0000
2	1.91	Chloride	BMB	6.809	44.7714	44.7714	1.0000
3	2.16	Nitrite,N	BMB	0.624	1.8856	1.8856	1.0000
4	2.47	Sulfate	BMB	2.356	24.2691	24.2691	1.0000
5	2.68	Bromide	BMB	0.021	0.6007	0.6007	1.0000
6	3.02	Nitrate	BMB	0.641	2.0365	2.0365	1.0000
7	3.19	Chlorate	BMB	0.011	1.6627	1.6627	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**10.938**		**77.40**	

149 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 02:36**	*Sample Weight:*	**1.0000**

Run Time:



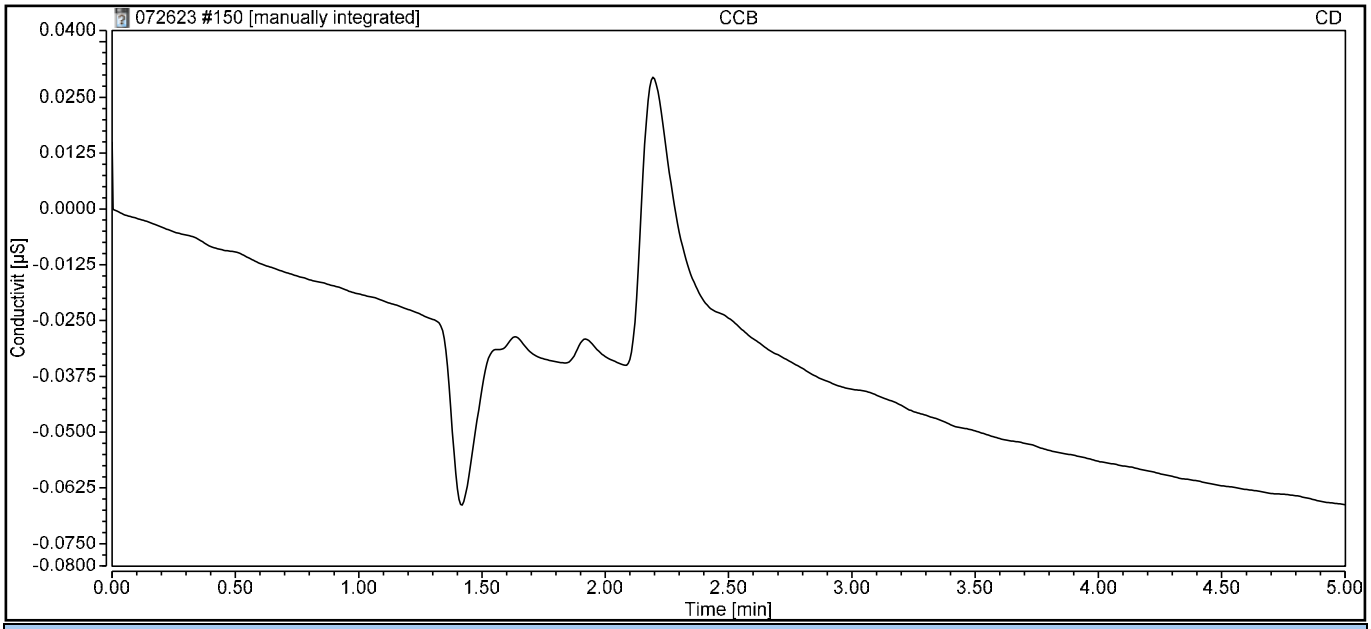
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.903	4.1168	4.1168	1.0000
2	1.91	Chloride	BMB	3.085	20.3506	20.3506	1.0000
3	2.16	Nitrite,N	BMB	1.296	4.0170	4.0170	1.0000
4	2.47	Sulfate	BM *	1.897	19.5620	19.5620	1.0000
5	2.67	Bromide	MB*	0.151	3.8163	3.8163	1.0000
6	3.01	Nitrate	BMB	1.254	3.9835	3.9835	1.0000
7	3.19	Chlorate	BMB	0.021	3.2232	3.2232	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.608**		**59.07**	

150 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 02:42**	*Sample Weight:*	**1.0000**

Run Time:



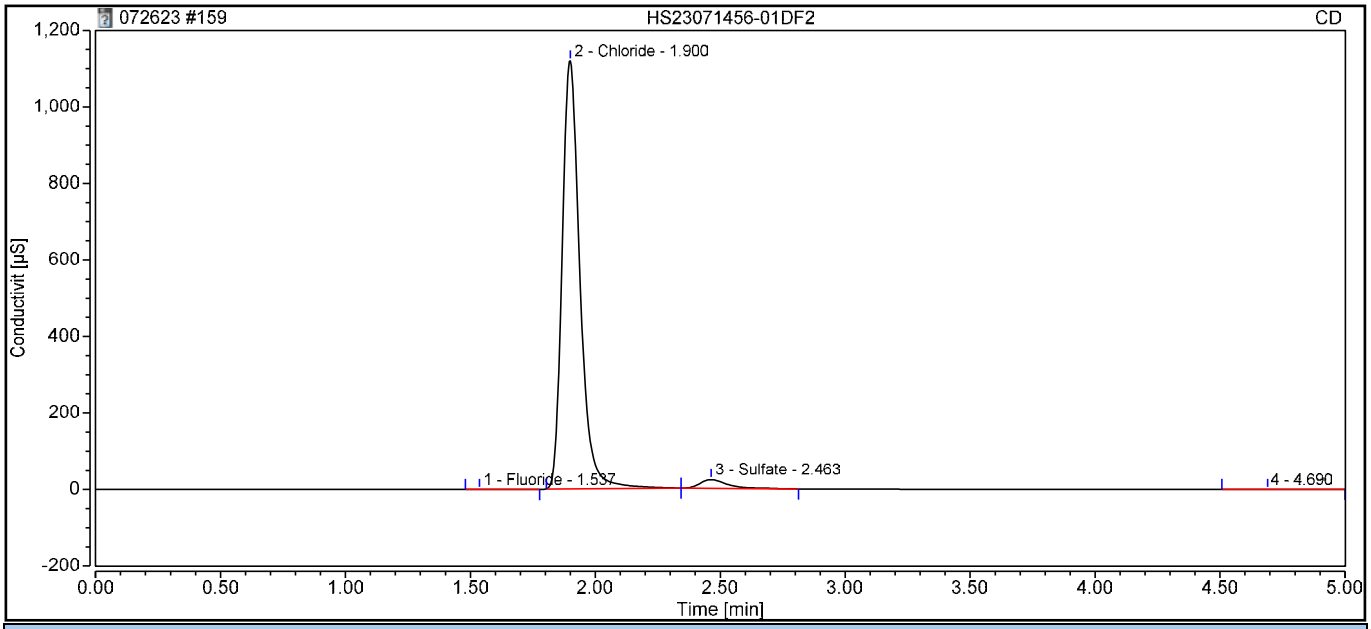
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

159 HS23071456-01DF2

Sample Name:	**HS23071456-01DF2**	*Injection Volume:*	**5.00**
Vial Number:	**BE3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**07/27/2023 03:40**	*Sample Weight:*	**1.0000**

Run Time:



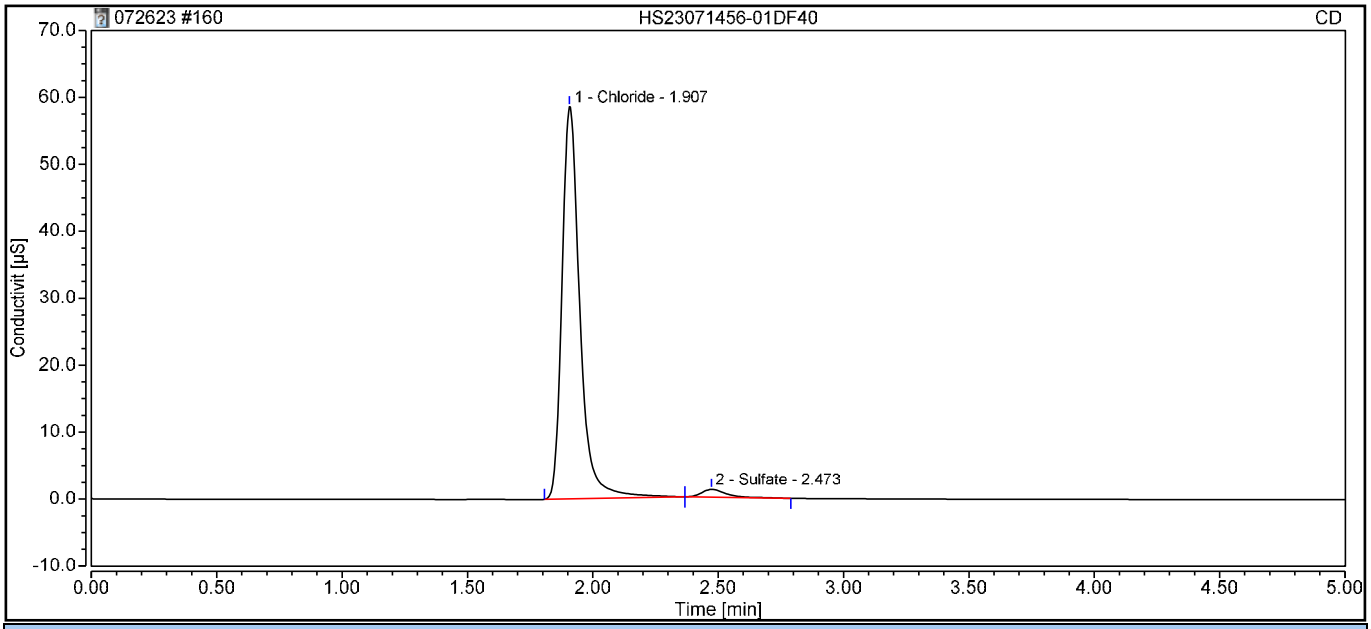
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.010	0.0741	0.1482	2.0000
2	1.90	Chloride	BMB	92.473	606.4800	1212.9601	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
3	2.46	Sulfate	BMB	2.875	29.5921	59.1842	2.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**95.358**		**1272.29**	

160 HS23071456-01DF40

Sample Name:	**HS23071456-01DF40**	*Injection Volume:*	**5.00**
Vial Number:	**BE4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**40.0000**
Recording Time:	**07/27/2023 03:45**	*Sample Weight:*	**1.0000**

Run Time:



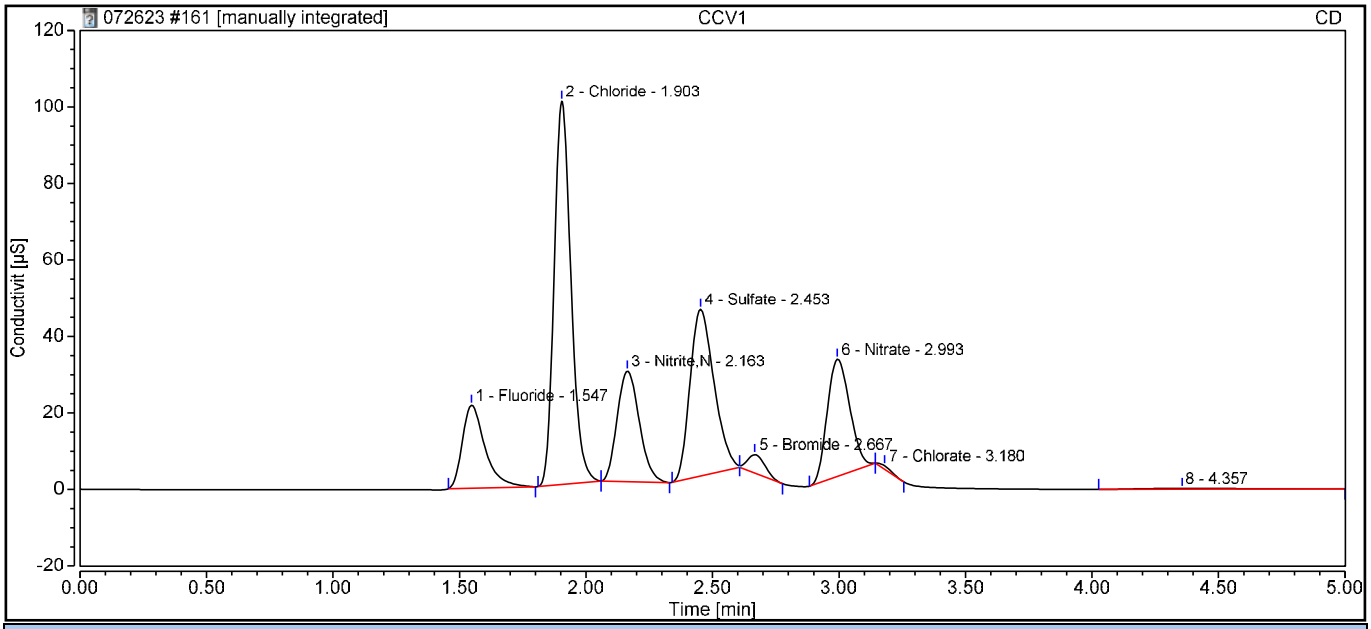
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	40.0000
1	1.91	Chloride	BMB	4.834	31.8182	1272.7293	40.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	40.0000
2	2.47	Sulfate	BMB	0.134	1.4849	59.3956	40.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	40.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	40.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	40.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	40.0000
Total:			**0.000**	**4.968**		**1332.12**	

161 CCV1

Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 04:09**	*Sample Weight:*	**1.0000**

Run Time:



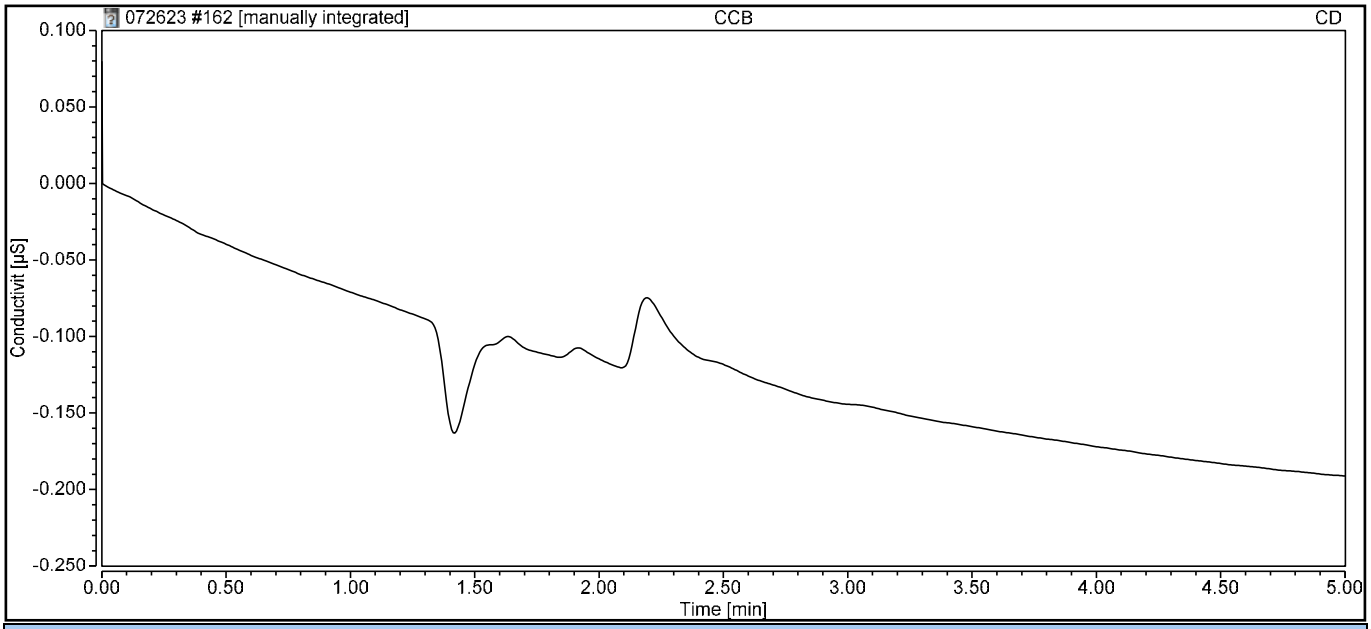
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	2.254	10.2318	10.2318	1.0000
2	1.90	Chloride	BMB	7.722	50.7563	50.7563	1.0000
3	2.16	Nitrite,N	BMB	2.928	9.8046	9.8046	1.0000
4	2.45	Sulfate	BM *	4.790	49.2263	49.2263	1.0000
5	2.67	Bromide	MB*	0.388	9.7150	9.7150	1.0000
6	2.99	Nitrate	BMB	3.164	10.0495	10.0495	1.0000
7	3.18	Chlorate	BMB	0.051	8.3912	8.3912	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**21.296**		**148.17**	

162 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 04:14**	*Sample Weight:*	**1.0000**

Run Time:



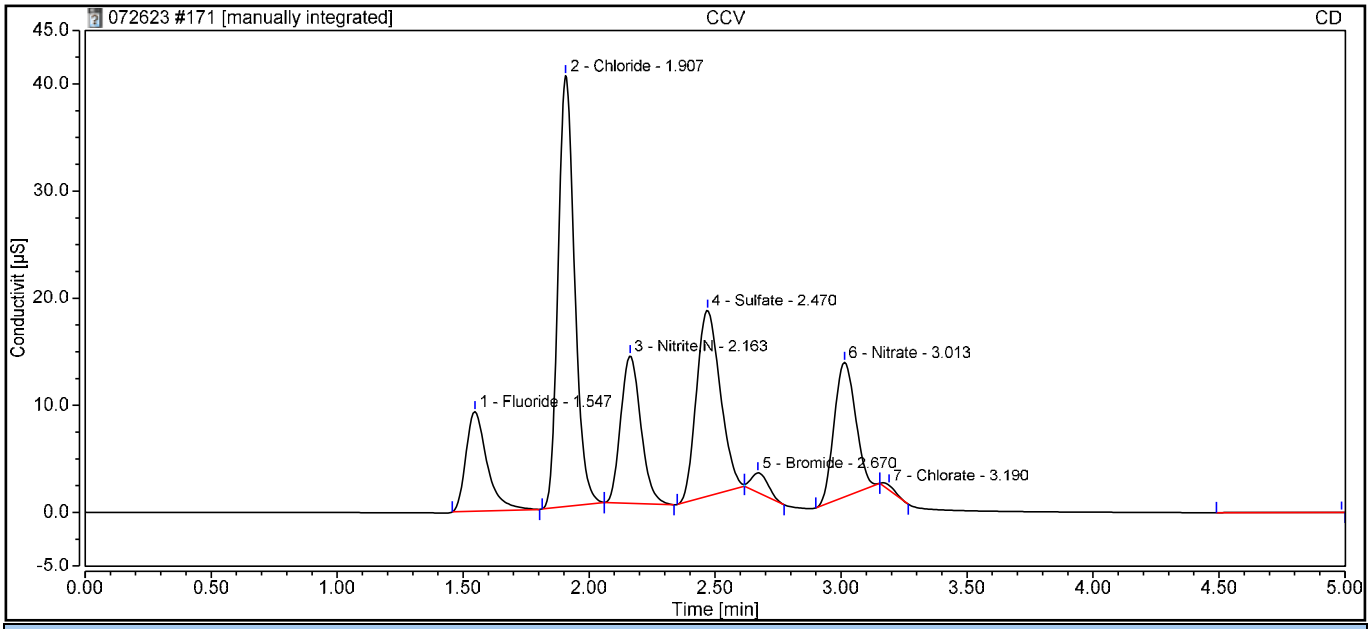
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

171 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 05:35**	*Sample Weight:*	**1.0000**

Run Time:



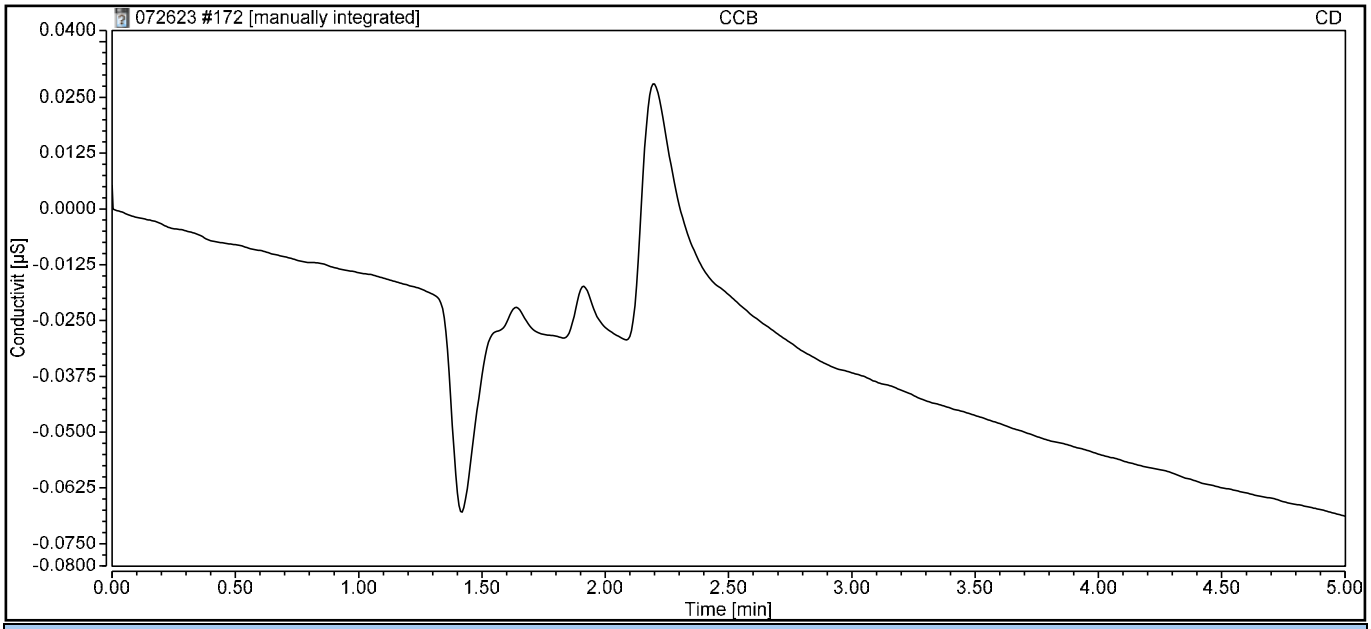
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.906	4.1300	4.1300	1.0000
2	1.91	Chloride	BMB	3.053	20.1443	20.1443	1.0000
3	2.16	Nitrite,N	BMB	1.276	3.9516	3.9516	1.0000
4	2.47	Sulfate	BM *	1.904	19.6269	19.6269	1.0000
5	2.67	Bromide	MB*	0.143	3.6298	3.6298	1.0000
6	3.01	Nitrate	BMB	1.241	3.9423	3.9423	1.0000
7	3.19	Chlorate	BMB	0.024	3.6716	3.6716	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.548**		**59.10**	

172 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/27/2023 05:41**	*Sample Weight:*	**1.0000**

Run Time:



Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

HS23080100 Longhorn GW Treatment Plant
Weekly Samples Cover Page

ALS WO# HS23080100

ALS Environmental
ALS Group USA, Corp
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www.alsglobal.com

Table of Contents

HS23080100 Longhorn GW Treatment Plant Weekly Samples Cover Page
- CoverPage
- HS23080100 Longhorn GW Treatment Plant Weekly Samples Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - LH18/24-SP650_080123
  - LH18/24-SP650_080123_AIX
  - LH18/24-SP650_080123_BIX
  - Dates Report
  - QC
  - Acronyms
  - Certifications
  - SampleReceiptCheckList
  - COC
  - HS23080100-E2300707 Perchlorate Final Report
- HS23080100 Wetchem NIT-AMM_W- E350.3 - ISE
- HS23080100 Wetchem P-ORTHO
- HS23080100 Wetchem TOC_W
- HS23080100-E2300707 Perchlorate Final Report IV
  - CoverLetter
  - Certificate of Analysis

Table of Contents (continued)

Chain of Custody
Preparation Sheets
Analytical Results
Accuracy and Precision
Initial Calibration
Chromatograms and Selected Ion Monitoring

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alsglobal.com

right solutions.
right partner.

WorkOrder: HS23080100

Longhorn GW Treatment Plant Weekly Samples

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

16-Aug-2023

HS23080100 Longhorn GW Treatment Plant Weekly Samples Final

ALS WO# HS23080100

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
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August 24, 2023

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS23080100**

Laboratory Results for: **Longhorn GW Treatment Plant Weekly Samples**

Dear Marcia Olive,

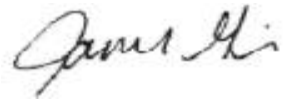
ALS Environmental received 3 sample(s) on Aug 02, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,



Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
Work Order: HS23080100

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23080100-01	LH18/24-SP650_080123	Water		01-Aug-2023 13:00	02-Aug-2023 09:30	☐
HS23080100-02	LH18/24-SP650_080123_AIX	Water		01-Aug-2023 13:00	02-Aug-2023 09:30	☐
HS23080100-03	LH18/24-SP650_080123_BIX	Water		01-Aug-2023 13:00	02-Aug-2023 09:30	☐

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: Longhorn GW Treatment Plant Weekly Samples
Work Order: HS23080100

Work Order Comments

- The analysis for Perchlorate was subcontracted to ALS Houston High-Res Lab. Final report attached

WetChemistry by Method E415.1

Batch ID: R443368

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E350.3

Batch ID: R443127

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E365.3

Batch ID: R443014

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US

Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.

ANALYTICAL REPORT

Project: Longhorn GW Treatment Plant Weekly Samples

WorkOrder:HS23080100

Sample ID: LH18/24-SP650_080123

Lab ID:HS23080100-01

Collection Date: 01-Aug-2023 13:00

Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
AMMONIA AS N BY E350.3(ISE)		**Method:E350.3**						Analyst: AB
Nitrogen, Ammonia (As N)	**6.9**	a	**0.10**	**0.20**	**0.20**	**mg/L**	1	03-Aug-2023 16:08
ORTHO PHOSPHATE (PO4) AS P BY E365.3-1978		**Method:E365.3**						Analyst: AB
Phosphorus, Total Orthophosphate (As P)	**0.848**	a	**0.0100**	**0.0250**	**0.0250**	**mg/L**	1	02-Aug-2023 17:07
TOTAL ORGANIC CARBON BY E415.1		**Method:E415.1**						Analyst: DW
Organic Carbon, Total	**74.0**	a	**5.00**	**10.0**	**10.0**	**mg/L**	10	07-Aug-2023 13:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.

ANALYTICAL REPORT

Project: Longhorn GW Treatment Plant Weekly Samples

WorkOrder:HS23080100

Sample ID: LH18/24-SP650_080123_AIX

Lab ID:HS23080100-02

Collection Date: 01-Aug-2023 13:00

Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	23-Aug-2023 10:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.

ANALYTICAL REPORT

Project: Longhorn GW Treatment Plant Weekly Samples

WorkOrder:HS23080100

Sample ID: LH18/24-SP650_080123_BIX

Lab ID:HS23080100-03

Collection Date: 01-Aug-2023 13:00

Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	23-Aug-2023 10:43

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080100

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R443014 (0)	**Test Name :** ORTHO PHOSPHATE (PO4) AS P BY E365.3-1978				**Matrix:** Water	
HS23080100-01	LH18/24-SP650_080123	01 Aug 2023 13:00			02 Aug 2023 17:07	1
Batch ID: R443127 (0)	**Test Name :** AMMONIA AS N BY E350.3(ISE)				**Matrix:** Water	
HS23080100-01	LH18/24-SP650_080123	01 Aug 2023 13:00			03 Aug 2023 16:08	1
Batch ID: R443368 (0)	**Test Name :** TOTAL ORGANIC CARBON BY E415.1				**Matrix:** Water	
HS23080100-01	LH18/24-SP650_080123	01 Aug 2023 13:00			07 Aug 2023 13:51	10
Batch ID: R444612 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS23080100-02	LH18/24-SP650_080123_AIX	01 Aug 2023 13:00			23 Aug 2023 10:43	1
HS23080100-03	LH18/24-SP650_080123_BIX	01 Aug 2023 13:00			23 Aug 2023 10:43	1

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080100

QC BATCH REPORT

Batch ID: R443014 (0) **Instrument:** UV-2450 **Method:** ORTHO PHOSPHATE (PO4) AS P BY E365.3-1978

MBLK Sample ID: **MBLK-R443014** Units: **mg/L** Analysis Date: **02-Aug-2023 17:07**
Client ID: Run ID: **UV-2450_443014** SeqNo: **7467718** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	0.0250	0.0250								U

LCS Sample ID: **LCS-R443014** Units: **mg/L** Analysis Date: **02-Aug-2023 17:07**
Client ID: Run ID: **UV-2450_443014** SeqNo: **7467717** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	0.272	0.0250	0.25	0	109	85 - 115				

MS Sample ID: **HS23080098-02MS** Units: **mg/L** Analysis Date: **02-Aug-2023 17:07**
Client ID: Run ID: **UV-2450_443014** SeqNo: **7467720** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	0.762	0.0250	0.25	0.532	92.0	80 - 120				

MSD Sample ID: **HS23080098-02MSD** Units: **mg/L** Analysis Date: **02-Aug-2023 17:07**
Client ID: Run ID: **UV-2450_443014** SeqNo: **7467719** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	0.768	0.0250	0.25	0.532	94.4	80 - 120	0.762	0.784	20	

The following samples were analyzed in this batch: HS23080100-01

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080100

QC BATCH REPORT

Batch ID: R443127 (0) **Instrument: WetChem_HS** **Method: AMMONIA AS N BY E350.3(ISE)**

MBLK Sample ID: **MBLK-R443127** Units: **mg/L** Analysis Date: **03-Aug-2023 16:08**
Client ID: Run ID: **WetChem_HS_443127** SeqNo: **7470507** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	0.20	0.20								U

LCS Sample ID: **LCS-R443127** Units: **mg/L** Analysis Date: **03-Aug-2023 16:08**
Client ID: Run ID: **WetChem_HS_443127** SeqNo: **7470506** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	8.512	0.20	10	0	85.1	80 - 120				

MS Sample ID: **HS23071866-01MS** Units: **mg/L** Analysis Date: **03-Aug-2023 16:08**
Client ID: Run ID: **WetChem_HS_443127** SeqNo: **7470502** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	10.66	0.20	10	0.805	98.5	80 - 120				

MSD Sample ID: **HS23071866-01MSD** Units: **mg/L** Analysis Date: **03-Aug-2023 16:08**
Client ID: Run ID: **WetChem_HS_443127** SeqNo: **7470501** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	10.72	0.20	10	0.805	99.2	80 - 120	10.66	0.627	20	

The following samples were analyzed in this batch: HS23080100-01

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080100

QC BATCH REPORT

Batch ID: R443368 (0) **Instrument: TOC_04** **Method: TOTAL ORGANIC CARBON BY E415.1**

MBLK Sample ID: **MBLK-08072023** Units: **mg/L** Analysis Date: **07-Aug-2023 13:11**
Client ID: Run ID: **TOC_04_443368** SeqNo: **7476526** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS-08072023** Units: **mg/L** Analysis Date: **07-Aug-2023 13:24**
Client ID: Run ID: **TOC_04_443368** SeqNo: **7476527** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.999	1.00	10	0	100.0	85 - 115				

LCSD Sample ID: **LCSD-08072023** Units: **mg/L** Analysis Date: **07-Aug-2023 13:38**
Client ID: Run ID: **TOC_04_443368** SeqNo: **7476528** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.13	1.00	10	0	101	85 - 115	9.999	1.3	20	

MS Sample ID: **HS23080362-01MS** Units: **mg/L** Analysis Date: **07-Aug-2023 14:32**
Client ID: Run ID: **TOC_04_443368** SeqNo: **7476532** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	14.43	1.00	10	4.316	101	80 - 120				

The following samples were analyzed in this batch: HS23080100-01

ALS Houston, US Date: 24-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: **HS23080100**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 24-Aug-23

Sample Receipt Checklist

Work Order ID: HS23080100 **Date/Time Received:** 02-Aug-2023 09:30

Client Name: Bhate Environmental **Received by:** Corey Grandits

Completed By: /S/ Corey Grandits (eSignature) 02-Aug-2023 10:40 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	3.7UC/3.6C	IR31
Cooler(s)/Kit(s):	50654	
Date/Time sample(s) sent to storage:	8/2/23	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stanciff Rd. Suite 210 Houston, TX. 77099 (281) 530-5656 ATTN: Dane Wacasey

Project: BHATE
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. JVPCIBH.0001

Job: GROUNDWATER TREATMENT PLANT WEEKLY SAMPLES

Prepared By: Scott Beesinger

P.O. Number

HS23080100

Bhate Environmental Associates, Inc.
Longhorn GW Treatment Plant Weekly Samples

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	AMMONIA-N	TOTAL ORGANIC CARBON	ORTHO-PHOSPHATE	PERCHLORATE	Remarks (Preservatives, etc.)	Lab I.D.#
LH18/24-SP650_080123	Water	08/01/23 / 13:00		3	X	X			H2SO4	
LH18/24-SP650_080123	Water	08/01/23 / 13:00		1			X		NONE	
LH18/24-SP650_080123_AIX	Water	08/01/23 / 13:00		1				X	NONE	
LH18/24-SP650_080123_BIX	Water	08/01/23 / 13:00		1				X	NONE	

Additional Remarks: **24 HR. TAT on Perchlorate Samples. Standard TAT on all other parameters**

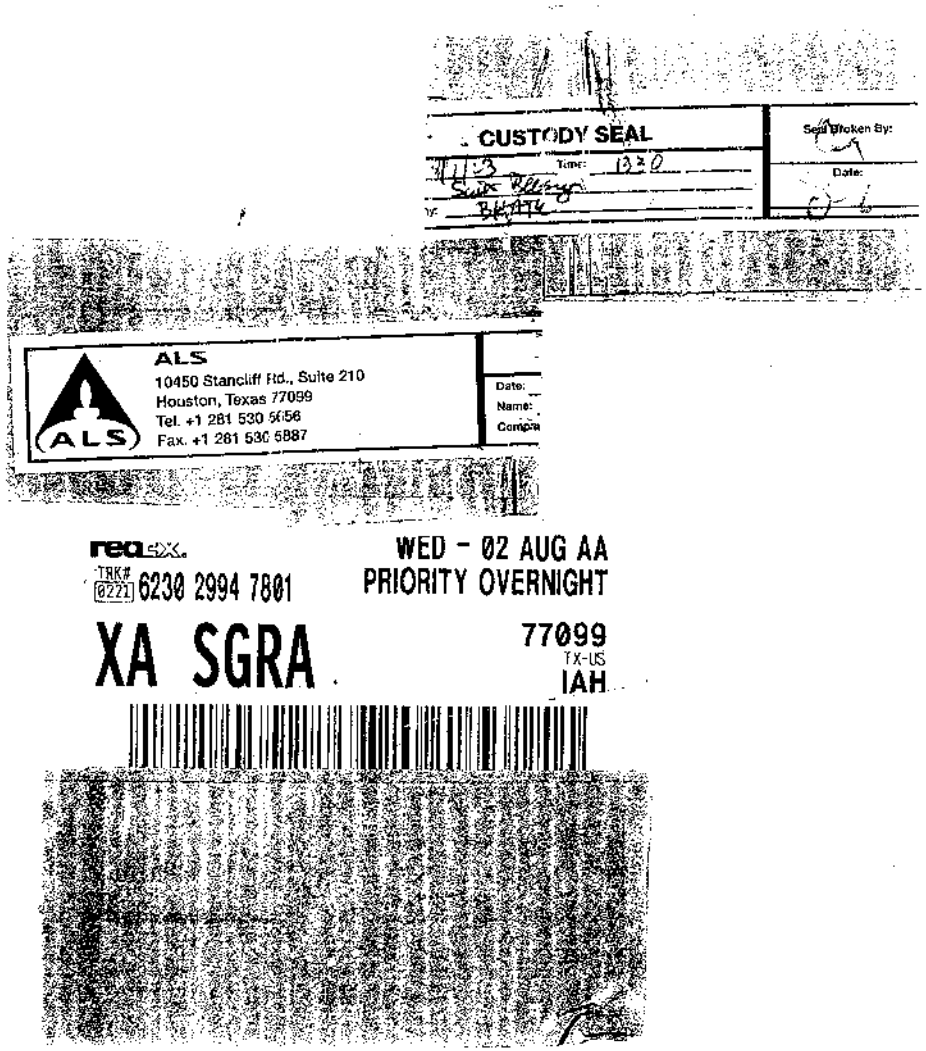
Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	08/01/23	13:30	[illegible]	8-2-23	0736						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks: 3.7° CR31 90654

Word) S:\Forms\Chain of Custody - BiWeekly


CUSTODY SEAL
Seal Broken By:
Time:
Date:
ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
Date:
Name:
fedex
TRK# 0221 6230 2994 7801
WED - 02 AUG AA
PRIORITY OVERNIGHT
XA SGRA
77099
TX-US
IAH

August 03, 2023 Service Request No:E2300707

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080100

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 02, 2023
For your reference, these analyses have been assigned our service request number **E2300707.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300707
Project:	HS23080100	**Date Received:**	08/02/2023
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two samples were received for analysis at ALS Environmental in Houston on 08/02/2023.

The samples were received in good condition and is consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300376: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300707
Project: HS23080100

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300707-001	LH18/24-SP650_080123_AIX	8/1/2023	1300
E2300707-002	LH18/24-SP650_080123_BIX	8/1/2023	1300

Service Request Summary

Folder #: **E2300707**
Client Name: ALS Environmental - US
Project Name: HS23080100
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080100
EDD: BASIC_WQC_CASNo_LOD

2 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300707-001	LH18/24-SP650_080123_AIX	Water	08/01/23 1300	**IV**
E2300707-002	LH18/24-SP650_080123_BIX	Water	08/01/23 1300	**IV**

Service Request Summary

Folder #: **E2300707**
Client Name: ALS Environmental - US
Project Name: HS23080100
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080100
EDD: BASIC_WQC_CASNo_LOD

2 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
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Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

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Houston, TX 77099
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Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22574

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080100
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080100-02**	**LH18/24-SP650_080123_AIX**	**Water**	**01 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			03 Aug 2023
2.	**HS23080100-03**	**LH18/24-SP650_080123_BIX**	**Water**	**01 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			03 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: NR Date/Time:

Received By: Date/Time: 8.2.23 1045

Cooler ID(s): Temperature(s):

Cooler Receipt Form

ALS Environmental

Project Chemist JG

Client/Project ALS

Thermometer ID 1231

Date/Time Received: 8-2-23 Initials: LJ

Date/Time Logged in: 8.2.23 Initials LJ

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No If yes, how many and where?

Were they intact? ○ Yes ○ No ☒ N/A

Were they signed and dated? ○ Yes ○ No ☒ N/A

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-2-23	1049	LJ	9.2	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
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www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 424032 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/2/23 08:32

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300694-001	OBFOD-MW01	.01	6850/ClO4 DOD			Water	10mL	
2	E2300694-002	OBFOD-3	.01	6850/ClO4 DOD			Water	10mL	
3	E2300694-003	JOD-MW01	.02	6850/ClO4 DOD			Water	10mL	
4	E2300694-004	JOD-MW04	.01	6850/ClO4 DOD			Water	10mL	
5	E2300695-001	OBFOB-MW02	.01	6850/ClO4 DOD			Water	10mL	
6	E2300695-002	OBFOB-MW03	.01	6850/ClO4 DOD			Water	10mL	
7	E2300695-003	OBFOB-MW01	.01	6850/ClO4 DOD			Water	10mL	
8	E2300695-004	OBF-2	.01	6850/ClO4 DOD			Water	10mL	
9	E2300695-005	OBFOD-2R	.01	6850/ClO4 DOD			Water	10mL	
10	E2300695-006	OBFOD-1	.01	6850/ClO4 DOD			Water	10mL	
11	E2300695-007	DUP-01	.01	6850/ClO4 DOD			Water	10mL	
12	E2300696-001	JOD-MW02	.01	6850/ClO4 DOD			Water	10mL	
13	E2300696-002	JOD-MW03	.01	6850/ClO4 DOD			Water	10mL	
14	E2300696-003	DUP-02	.01	6850/ClO4 DOD			Water	10mL	
15	E2300707-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
16	E2300707-002	LH18/24-SP650_080123_BIX	.01	6850/ClO4 DOD			Water	10mL	
17	EQ2300376-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300376-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300376-03	DLCS		6850/ClO4			Liquid	10mL	
20	EQ2300376-04	JOD-MW01 MS	.02	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300376-05	JOD-MW01 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
22	K2308541-001	FBR-INF-073123	.01	6850/ClO4			Water	10mL	
23	K2308541-002	LGAC-INF-073123	.01	6850/ClO4			Water	10mL	
24	K2308541-003	LGAC-INT1-073123	.01	6850/ClO4			Water	10mL	
25	K2308541-004	LGAC-INT2-073123	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300376-02	1.00µL	EQ2300376-02	1.00µL	EQ2300376-03	1.00µL	EQ2300376-03	1.00µL	EQ2300376-04	1.00µL	EQ2300376-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300694-001	100.00µL	E2300694-002	100.00µL	E2300694-003	100.00µL	E2300694-004	100.00µL	E2300695-001	100.00µL	E2300695-002	100.00µL
E2300695-003	100.00µL	E2300695-004	100.00µL	E2300695-005	100.00µL	E2300695-006	100.00µL	E2300695-007	100.00µL	E2300696-001	100.00µL
E2300696-002	100.00µL	E2300696-003	100.00µL	E2300707-001	100.00µL	E2300707-002	100.00µL	EQ2300376-01	100.00µL	EQ2300376-01	100.00µL

Preparation Information Benchsheet

Prep Run#: 424032 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/2/23 08:32

EQ2300376-02	100.00µL	EQ2300376-02	100.00µL	EQ2300376-03	100.00µL	EQ2300376-03	100.00µL	EQ2300376-04	100.00µL	EQ2300376-05	100.00µL
K2308541-001	100.00µL	K2308541-002	100.00µL	K2308541-003	100.00µL	K2308541-004	100.00µL				

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/2/23 08:32
Finished: 8/2/23 11:30
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP650_080123_AIX	**Units:**	µg/L
Lab Code:	E2300707-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**9.16**		0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 11:31	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP650_080123_BIX	**Units:**	µg/L
Lab Code:	E2300707-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**283**		1.00	0.500	0.250	10	8/ 2/23	8/3/23 11:37	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300376-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 09:35	424032	812728	

Accuracy & Precision

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10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300376-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0994**	J	0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 09:40	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300376-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.100**		0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 09:46	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100
Sample Matrix: Water

Service Request: E2300707
Date Analyzed: 8/ 3/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424032

	Lab Control Sample EQ2300376-02			Duplicate Lab Control Sample EQ2300376-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0994	0.100	99	0.100	0.100	100	84 - 119	<1	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Initial Calibration

ALS Environmental - Houston HRMS
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20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230802-001	Perchlorate6850c.lcm	1x		8/2/2023 13:05
2	IB		2230802-002	Perchlorate6850c.lcm	1x		8/2/2023 13:11
3	Perchlorate ICAL 1		2230802-003	Perchlorate6850c.lcm	1x	230373	8/2/2023 13:17
4	Perchlorate ICAL 2		2230802-004	Perchlorate6850c.lcm	1x	230375	8/2/2023 13:23
5	Perchlorate ICAL 3		2230802-005	Perchlorate6850c.lcm	1x	230376	8/2/2023 13:28
6	Perchlorate ICAL 4		2230802-006	Perchlorate6850c.lcm	1x	230377	8/2/2023 13:34
7	Perchlorate ICAL 5		2230802-007	Perchlorate6850c.lcm	1x	230378	8/2/2023 13:39
8	Perchlorate ICAL 6		2230802-008	Perchlorate6850c.lcm	1x	230379	8/2/2023 13:45
9	Perchlorate ICAL 7		2230802-009	Perchlorate6850c.lcm	1x	230380	8/2/2023 13:50
10	Perchlorate ICAL 8		2230802-010	Perchlorate6850c.lcm	1x	230381	8/2/2023 13:56
11	Perchlorate ICAL 9		2230802-011	Perchlorate6850c.lcm	1x	230382	8/2/2023 14:02
12	Perchlorate ICAL 10		2230802-012	Perchlorate6850c.lcm	1x	230383	8/2/2023 14:07
13	PerchlorateICV		2230802-013	Perchlorate6850c.lcm	1x	230385	8/2/2023 14:19

Initial Calibration - Detailed Report

Calibration ID: EC2300012 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300012-01	Perchlorate ICAL 1	2230802-003	08/02/2023 13:17
02	EC2300012-02	Perchlorate ICAL 2	2230802-004	08/02/2023 13:23
03	EC2300012-03	Perchlorate ICAL 3	2230802-005	08/02/2023 13:28
04	EC2300012-04	Perchlorate ICAL 4	2230802-006	08/02/2023 13:34
05	EC2300012-05	Perchlorate ICAL 5	2230802-007	08/02/2023 13:39
06	EC2300012-06	Perchlorate ICAL 6	2230802-008	08/02/2023 13:45
07	EC2300012-07	Perchlorate ICAL 7	2230802-009	08/02/2023 13:50
08	EC2300012-08	Perchlorate ICAL 8	2230802-010	08/02/2023 13:56
09	EC2300012-09	Perchlorate ICAL 9	2230802-011	08/02/2023 14:02
10	EC2300012-10	Perchlorate ICAL 10	2230802-012	08/02/2023 14:07

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.086** **Average RF = 0.1475**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1428	02	0.5000	0.1421	03	0.7000	0.1457	04	1.0000	0.149
05	2.0000	0.1515	06	5.0000	0.1475	07	10.0000	0.1503	08	20.0000	0.1477
09	30.0000	0.1485	10	50.0000	0.1496						

Analyte

Perchlorate RSE = 2.09

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0968	-3.2	02	0.5000	0.482	-3.6	03	0.7000	0.692	-1.2
04	1.0000	1.01	1.0	05	2.0000	2.05	2.7	06	5.0000	5.00	-0.0
07	10.0000	10.2	1.9	08	20.0000	20.0	0.2	09	30.0000	30.2	0.7
10	50.0000	50.7	1.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300012	**Instrument ID:**	E-LCMS-01
Datafile ID:	2230802-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300012-11	T	Average RF	10	10.670	ng/mL	6.7	<= 15

Insight Report

Printed at 8/3/2023 9:30:46 AM

Method File: I:\LCMS01\DATA\20230802\20230802ICAL.lcm
Project File: I:\LCMS01\DATA\20230802\no use\20230802ICAL.damlp

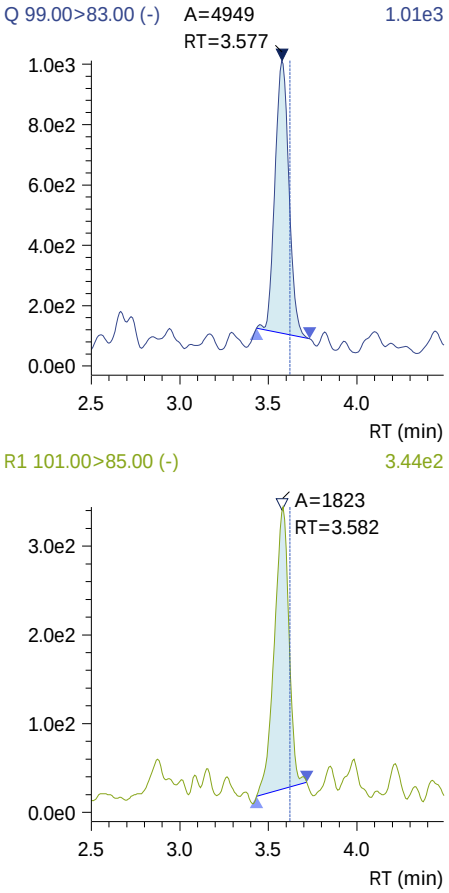
Perchlorate ICAL 1

Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	4949	346538	0.0968	ng/mL	101.00 >85.00	36.83	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.572	346538	346538	1.0000	ng/mL	----	----	

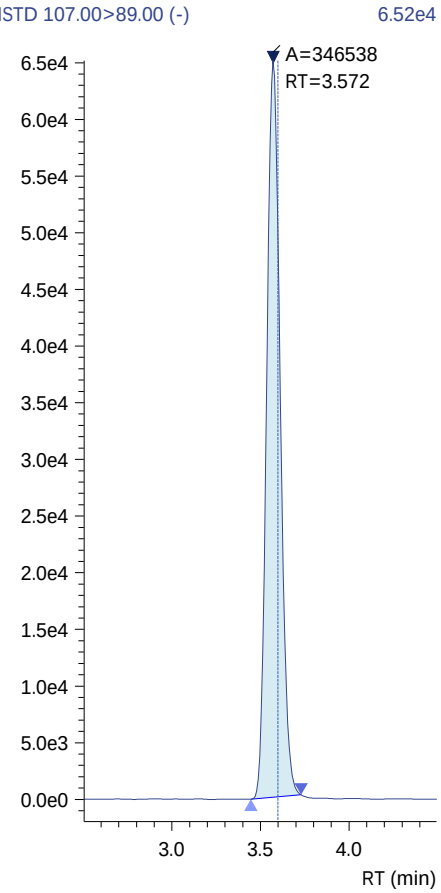
Perchlorate

Conc 0.0968
R#1 36.83 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

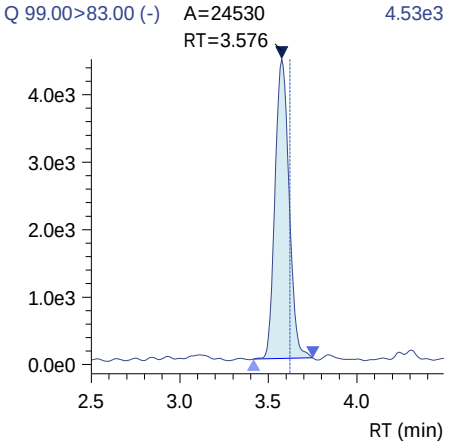
Perchlorate ICAL 2

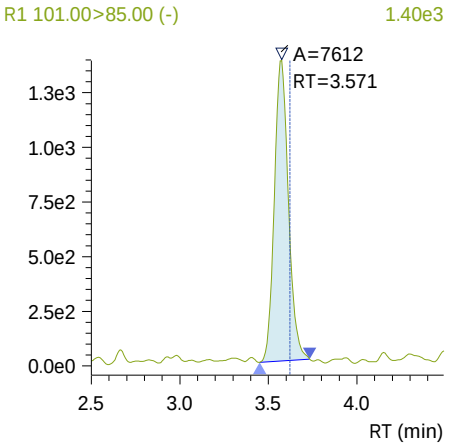
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	24530	345149	0.4820	ng/mL	101.00 >85.00	31.03	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.571	345149	345149	1.0000	ng/mL	----	----	

Perchlorate

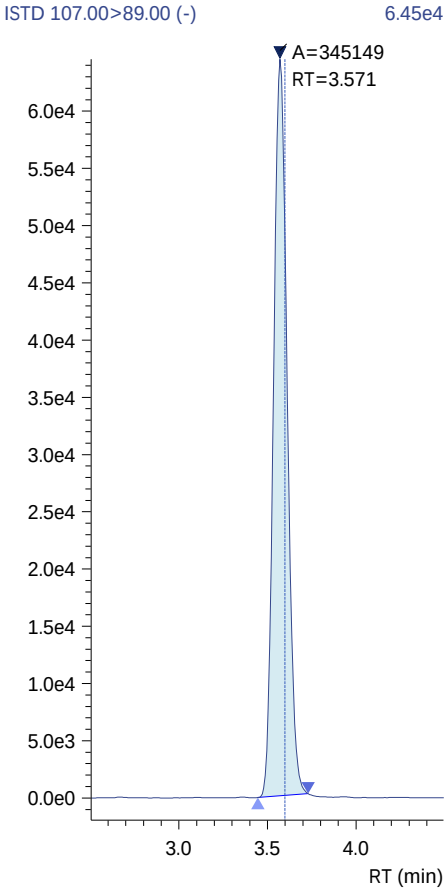
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

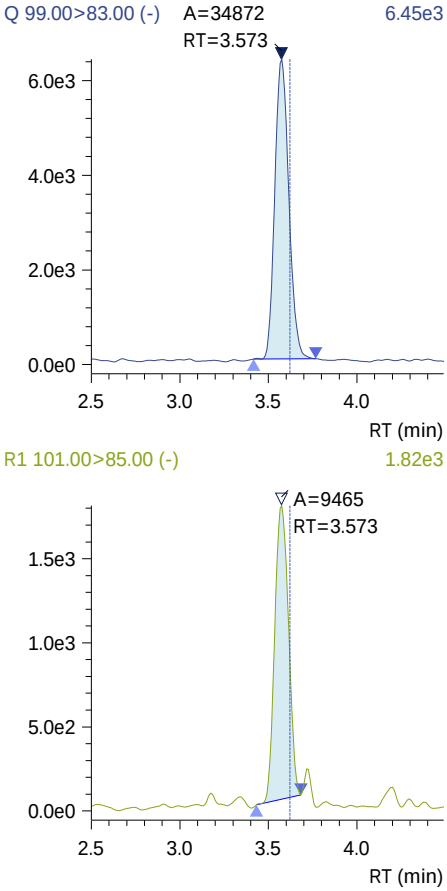
Perchlorate ICAL 3

Sample ID: Perchlorate ICAL 3
Date Acquired: 8/2/2023 1:28:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-005.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	34872	341974	0.6915	ng/mL	101.00 >85.00	27.14	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	341974	341974	1.0000	ng/mL	----	----	

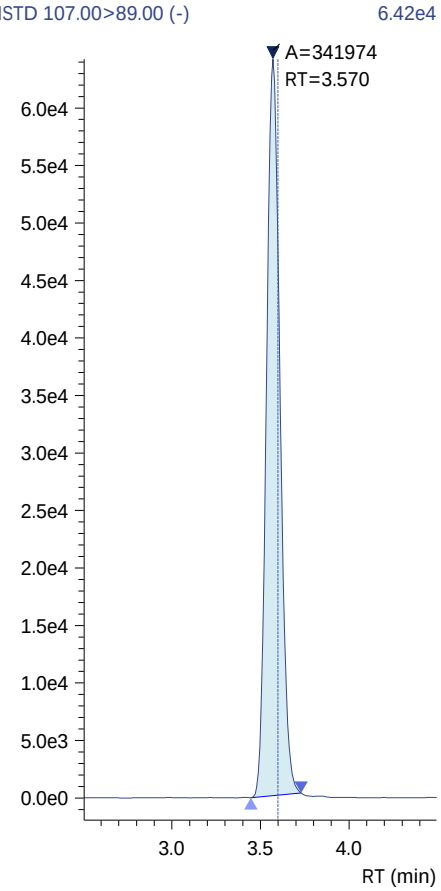
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

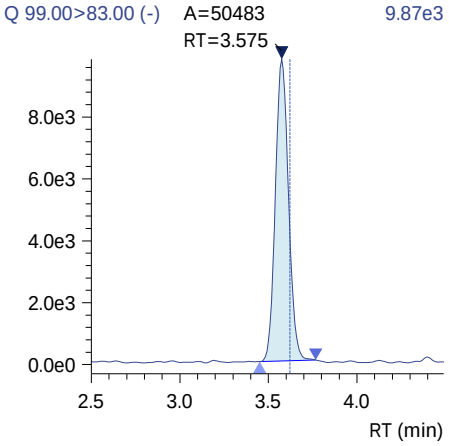
Perchlorate ICAL 4

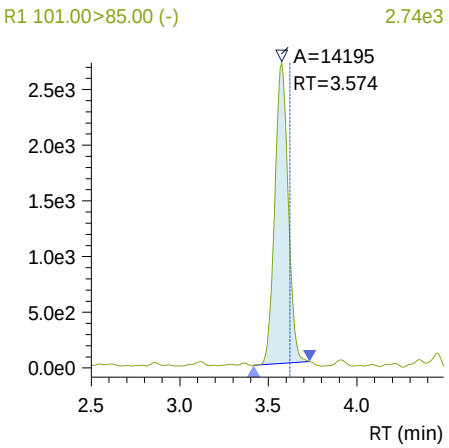
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	50483	338838	1.0104	ng/mL	101.00 >85.00	28.12	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	338838	338838	1.0000	ng/mL	----	----	

Perchlorate

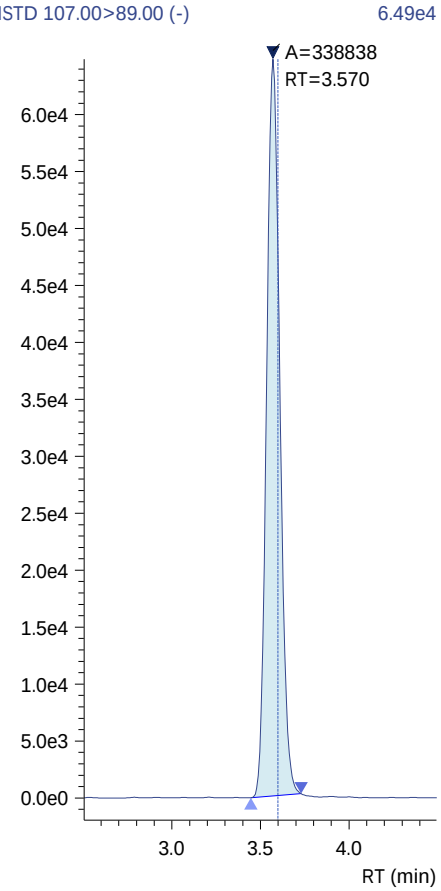
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

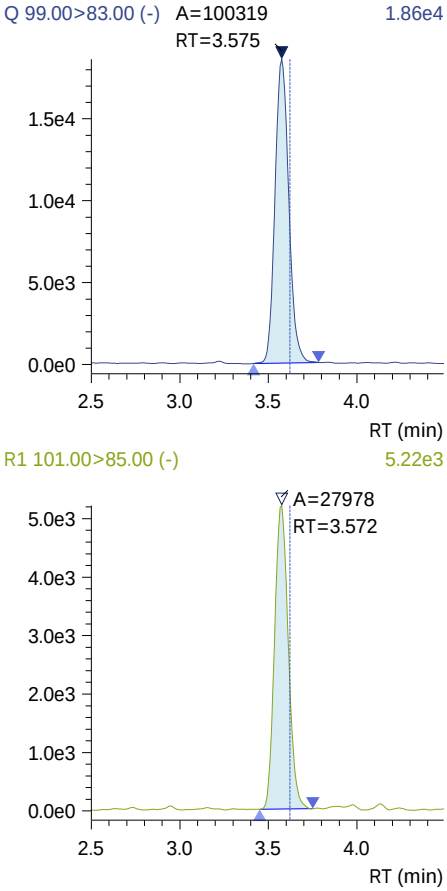
Perchlorate ICAL 5

Sample ID: Perchlorate ICAL 5
Date Acquired: 8/2/2023 1:39:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-007.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	100319	331124	2.0545	ng/mL	101.00 >85.00	27.89	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	331124	331124	1.0000	ng/mL	----	----	

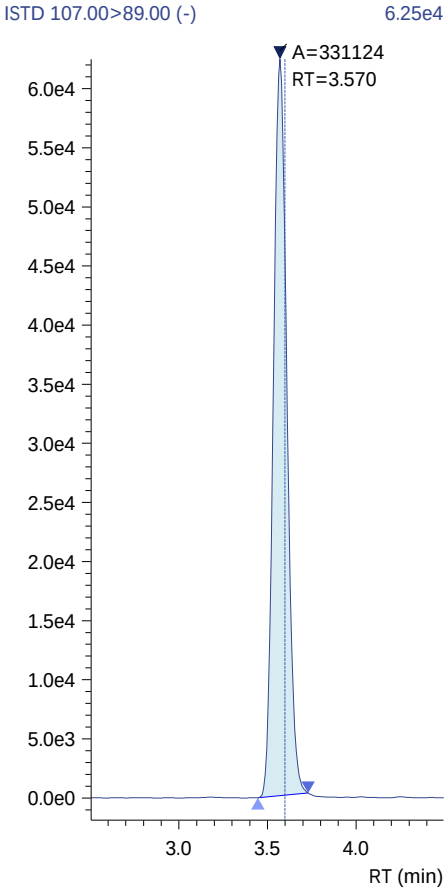
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

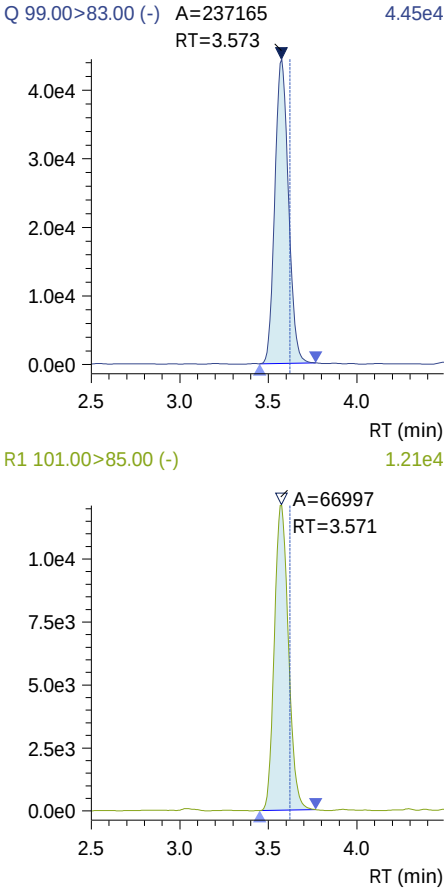
Perchlorate ICAL 6

Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	237165	321666	5.0000	ng/mL	101.00 >85.00	28.25	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	321666	321666	1.0000	ng/mL	----	----	

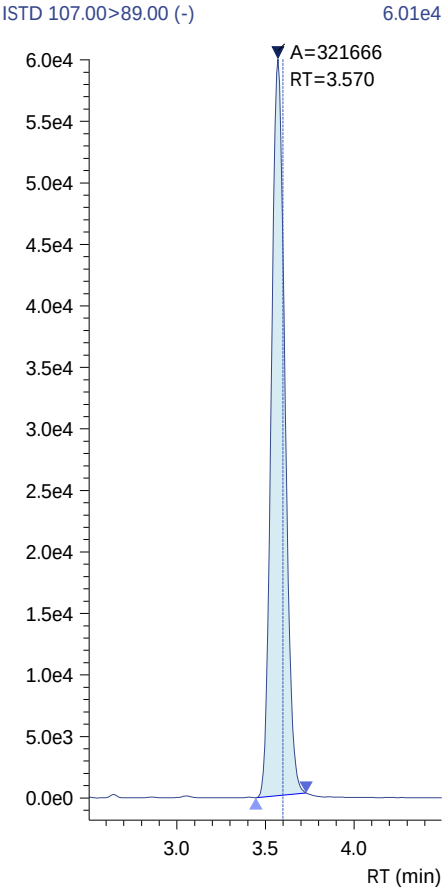
Perchlorate

Conc 5.0000
R#1 28.25 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

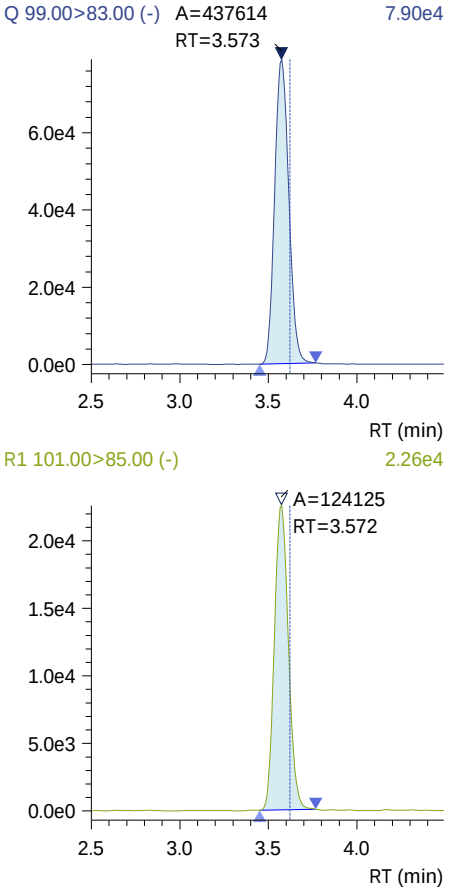
Perchlorate ICAL 7

Sample ID: Perchlorate ICAL 7
Date Acquired: 8/2/2023 1:50:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-009.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	437614	291215	10.1905	ng/mL	101.00 >85.00	28.36	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291215	291215	1.0000	ng/mL	----	----	

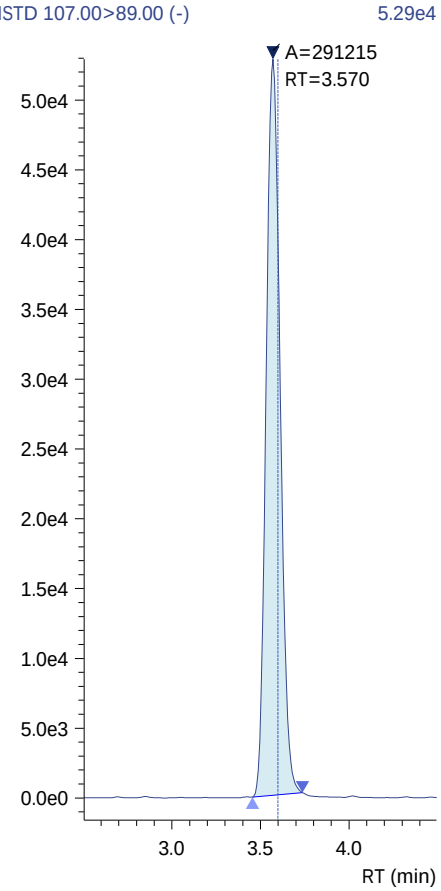
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 8

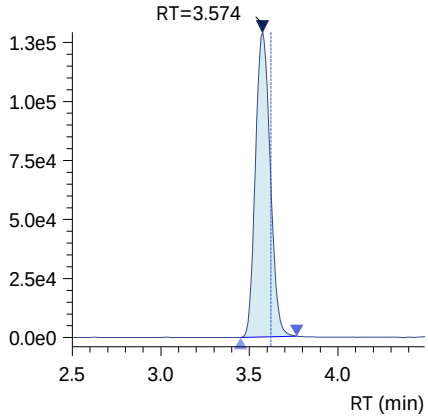
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	749856	253829	20.03 36	ng/mL	101.00 >85.00	28.56	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.569	253829	253829	1.0000	ng/mL	----	----	

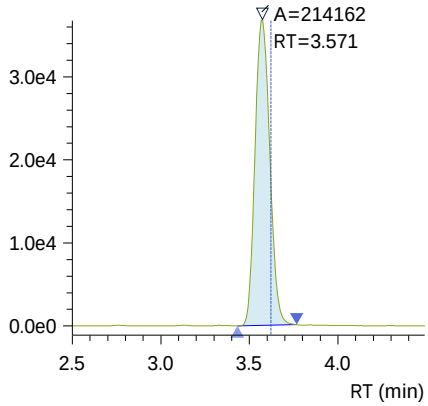
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



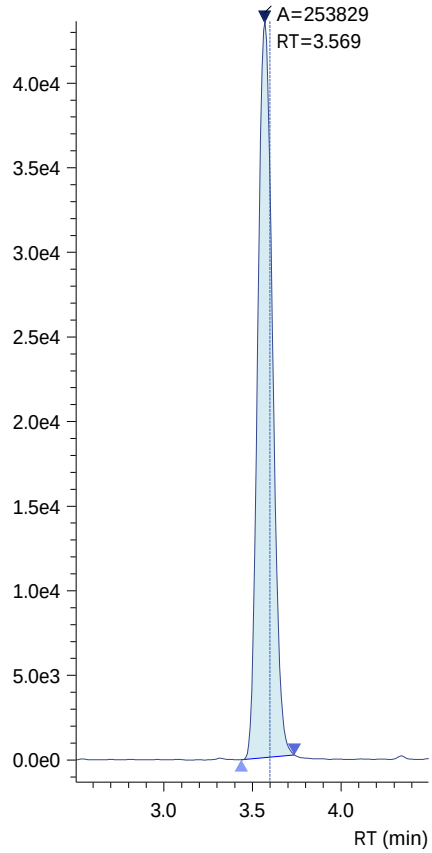
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 9

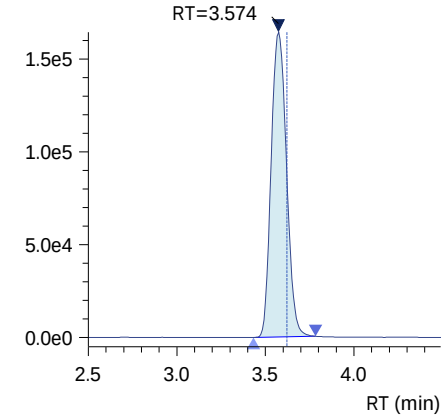
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	990671	222379	30.2105	ng/mL	101.00 >85.00	27.95	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.568	222379	222379	1.0000	ng/mL	----	----	

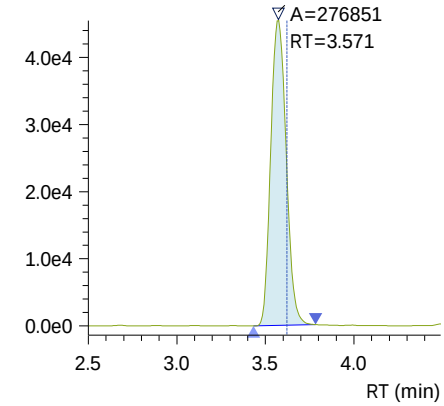
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 1.64e5



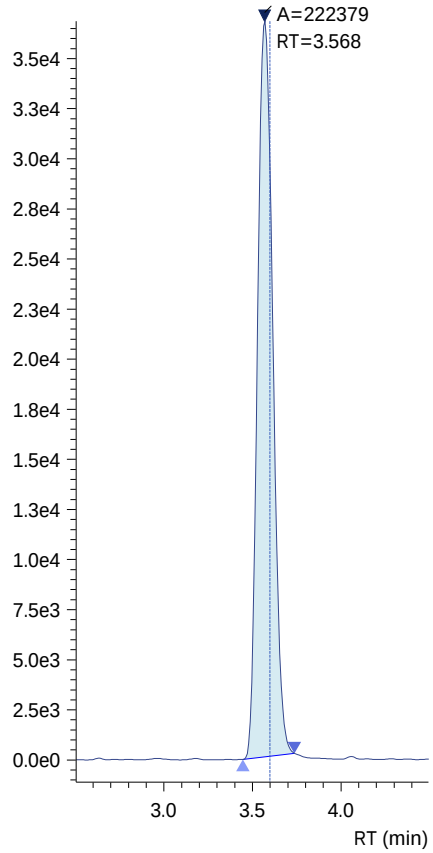
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 10

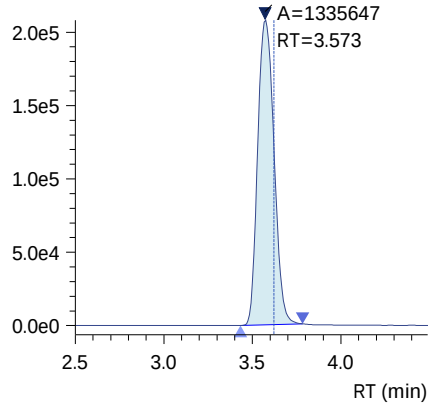
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1335647	178573	50.72 20	ng/mL	101.00 >85.00	28.04	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.567	178573	178573	1.0000	ng/mL	----	----	

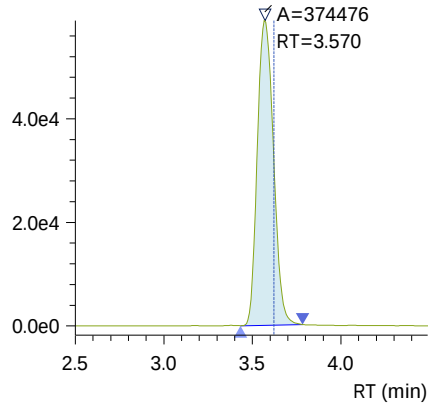
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



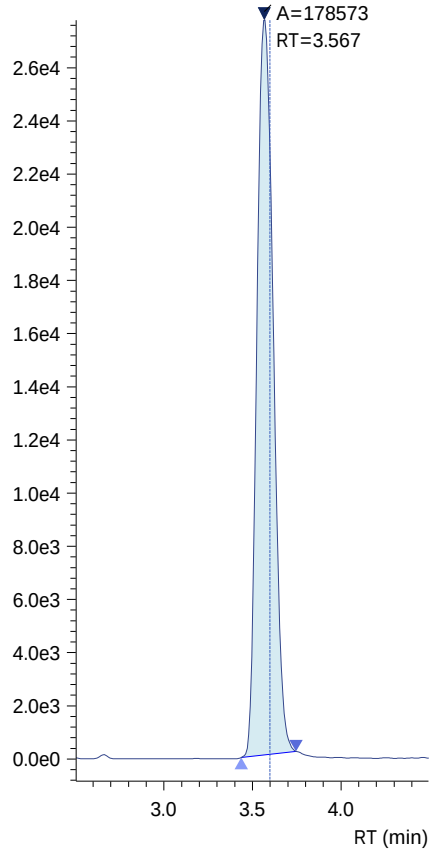
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

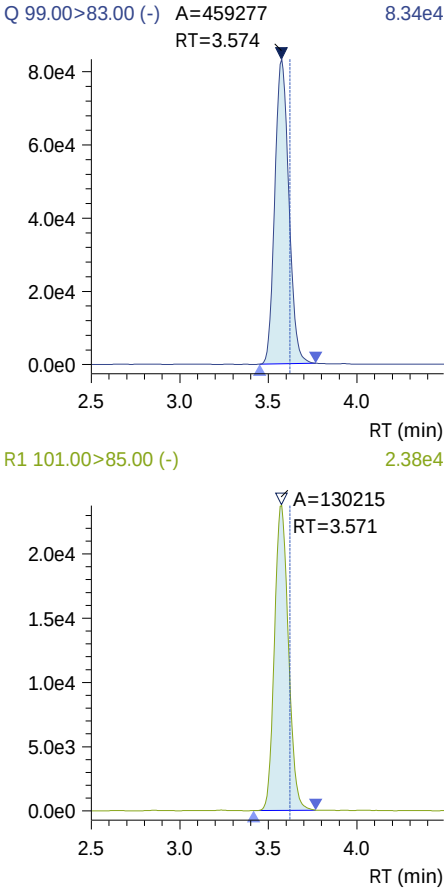
PerchlorateICV

Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	459277	291890	10.6703	ng/mL	101.00 >85.00	28.35	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291890	291890	1.0000	ng/mL	----	----	

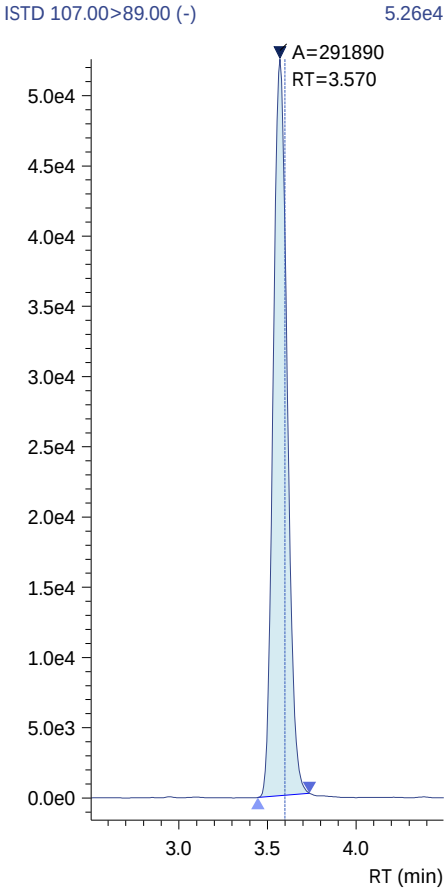
Perchlorate

Conc 10.6703
R#1 28.35 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230803-812728

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230803-001	Perchlorate6850c.lcm	1x		8/3/2023 9:04
2	LODV		2230803-002	Perchlorate6850c.lcm	1x	230386	8/3/2023 9:09
3	ICS		2230803-003	Perchlorate6850c.lcm	1x		8/3/2023 9:16
4	CCV		2230803-004	Perchlorate6850c.lcm	1x	230380	8/3/2023 9:22
5	EQ2300376-01		2230803-005	Perchlorate6850c.lcm	1x		8/3/2023 9:35
6	EQ2300376-02		2230803-006	Perchlorate6850c.lcm	1x		8/3/2023 9:40
7	EQ2300376-03		2230803-007	Perchlorate6850c.lcm	1x		8/3/2023 9:46
8	EQ2300376-04		2230803-008	Perchlorate6850c.lcm	1x		8/3/2023 9:51
9	EQ2300376-05		2230803-009	Perchlorate6850c.lcm	1x		8/3/2023 9:57
10	E2300694-001		2230803-010	Perchlorate6850c.lcm	1x		8/3/2023 10:02
11	E2300694-002		2230803-011	Perchlorate6850c.lcm	1x		8/3/2023 10:08
12	E2300694-003		2230803-012	Perchlorate6850c.lcm	1x		8/3/2023 10:14
13	E2300694-004		2230803-013	Perchlorate6850c.lcm	1x		8/3/2023 10:19
14	CCV		2230803-014	Perchlorate6850c.lcm	1x	230380	8/3/2023 10:25
15	E2300695-001		2230803-015	Perchlorate6850c.lcm	1x		8/3/2023 10:30
16	E2300695-002		2230803-016	Perchlorate6850c.lcm	1x		8/3/2023 10:36
17	E2300695-003		2230803-017	Perchlorate6850c.lcm	1x		8/3/2023 10:41
18	E2300695-004		2230803-018	Perchlorate6850c.lcm	1x		8/3/2023 10:47
19	E2300695-005		2230803-019	Perchlorate6850c.lcm	1x		8/3/2023 10:52
20	E2300695-006		2230803-020	Perchlorate6850c.lcm	1x		8/3/2023 10:58
21	E2300695-007		2230803-021	Perchlorate6850c.lcm	1x		8/3/2023 11:03
22	E2300696-001		2230803-022	Perchlorate6850c.lcm	1x		8/3/2023 11:09
23	E2300696-002		2230803-023	Perchlorate6850c.lcm	1x		8/3/2023 11:14
24	E2300696-003		2230803-024	Perchlorate6850c.lcm	1x		8/3/2023 11:20
25	CCV		2230803-025	Perchlorate6850c.lcm	1x	230380	8/3/2023 11:26
26	E2300707-001		2230803-026	Perchlorate6850c.lcm	1x		8/3/2023 11:31
27	E2300707-002		2230803-027	Perchlorate6850c.lcm	10x		8/3/2023 11:37
28	K2308541-001		2230803-028	Perchlorate6850c.lcm	1x		8/3/2023 11:42
29	K2308541-002		2230803-029	Perchlorate6850c.lcm	1x		8/3/2023 11:48
30	K2308541-003		2230803-030	Perchlorate6850c.lcm	1x		8/3/2023 11:53
31	K2308541-004		2230803-031	Perchlorate6850c.lcm	1x		8/3/2023 11:59
32	CCV		2230803-032	Perchlorate6850c.lcm	1x	230380	8/3/2023 12:04

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/3/23 09:22

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230803\2230803-004
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300377-01
Analysis Lot: 812728
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-01	299,309	3.59
Method Blank	EQ2300376-01	347,687	3.59
Lab Control Sample	EQ2300376-02	339,111	3.58
Duplicate Lab Control Sample	EQ2300376-03	340,973	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Analyzed:**	8/3/23 10:25

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230803\2230803-014	**Lab Code:**	EQ2300377-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	812728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-02	294,179	3.57

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/3/23 11:26

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230803\2230803-025
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300377-03
Analysis Lot: 812728
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-03	293,305	3.57
LH18/24-SP650_080123_AIX	E2300707-001	308,820	3.57
LH18/24-SP650_080123_BIX	E2300707-002	227,047	3.57

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Analyzed:**	8/3/23 12:04

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230803\2230803-032	**Lab Code:**	EQ2300377-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	812728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-04	294,279	3.57

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-004

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.92	0.1475	0.1463	-0.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-014

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1510	2.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-025

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1494	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-032

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1496	1.4	NA	± 15 %	Average RF

Insight Report

Printed at 8/3/2023 12:22:11 PM

Method File: I:\LCMS01\DATA\20230803\20230803.lcm
Project File: I:\LCMS01\DATA\20230803\20230803.damlp

IB

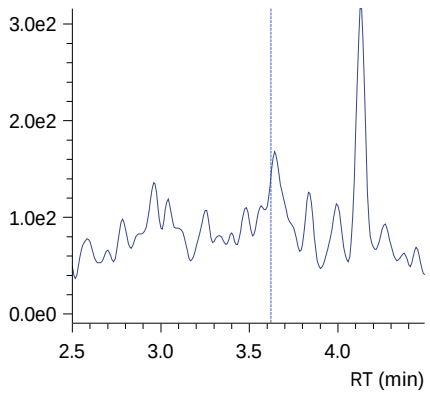
Sample ID: IB
Date Acquired: 8/3/2023 9:04:18 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	392197	----	ng/mL	101.00 >85.00	0.00	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.615	392197	392197	1.0000	ng/mL	----	----	

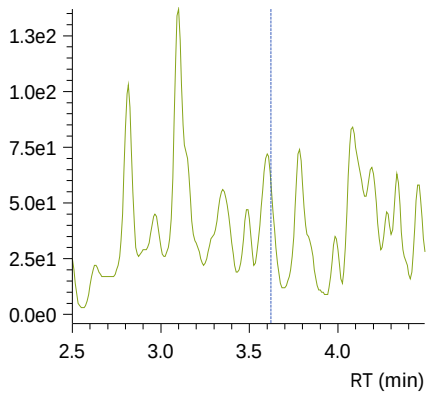
Perchlorate

Conc ----
R#1 0.00 (28.27)

Q 99.00>83.00 (-) 3.16e2



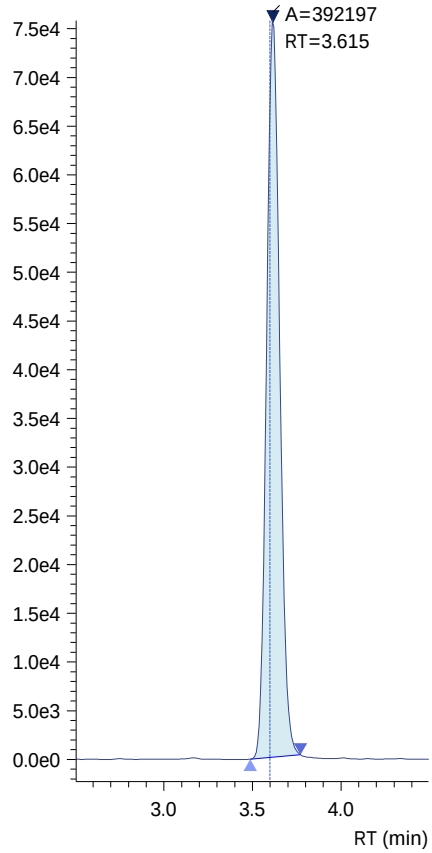
R1 101.00>85.00 (-) 1.37e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.58e4



Insight Report

Printed at 8/3/2023 12:22:11 PM

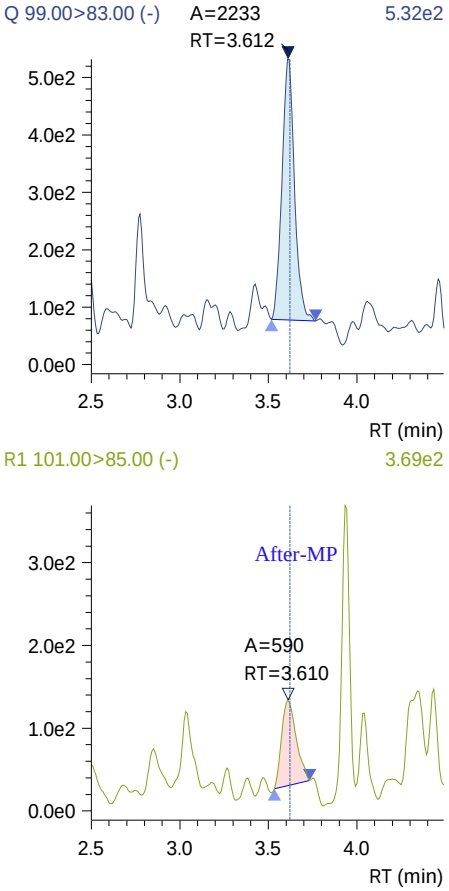
LODV

Sample ID: LODV
Date Acquired: 8/3/2023 9:09:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.612	2233	356427	0.0425	ng/mL	101.00 >85.00	26.40	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.604	3564 27	356427	1.0000	ng/mL	----	----	

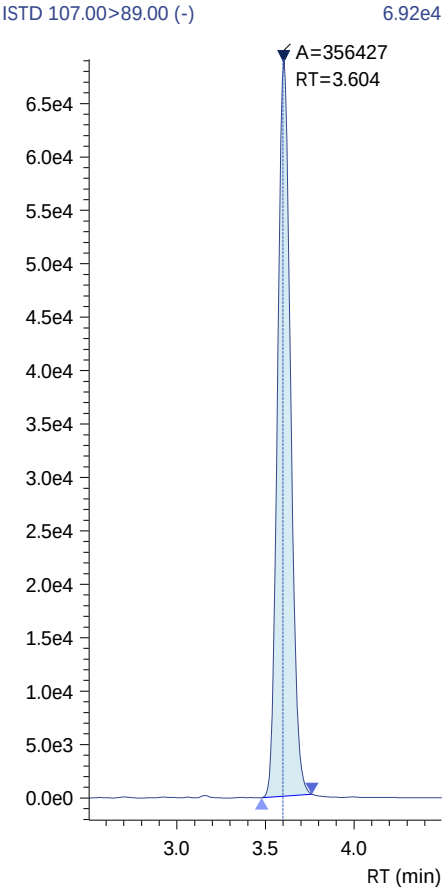
Perchlorate

Conc 0.0425
R#1 26.40 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:23:13 PM

Method File: I:\LCMS01\DATA\20230803\20230803.lcm
Project File: I:\LCMS01\DATA\20230803\20230803.damlp

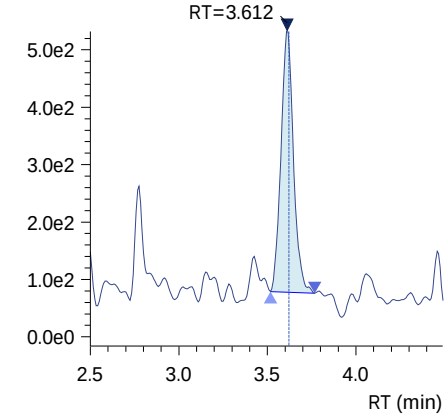
LODV

Sample ID: LODV
Date Acquired: 8/3/2023 9:09:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

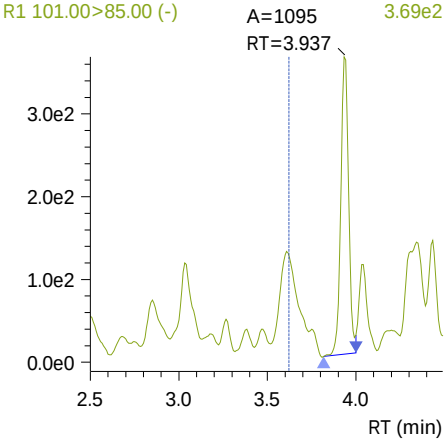
Perchlorate

Conc 0.0425
R#1 0.00 (28.27)

Q 99.00>83.00 (-) A=2233 5.32e2



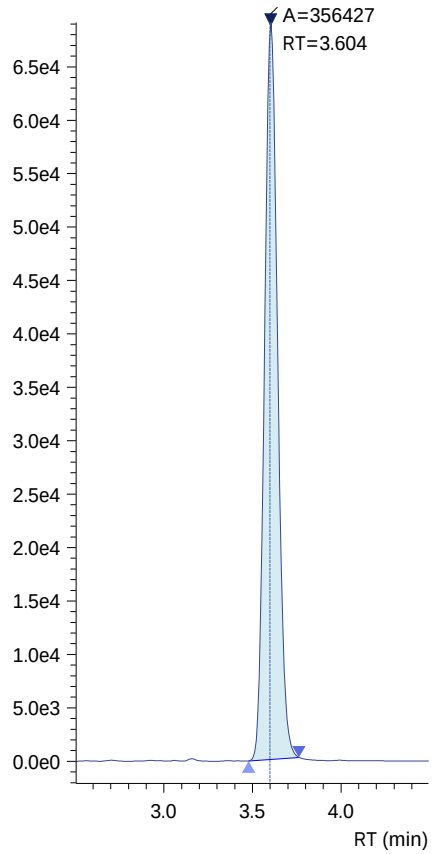
R1 101.00>85.00 (-) A=1095 3.69e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.92e4



Insight Report

Printed at 8/3/2023 12:22:11 PM

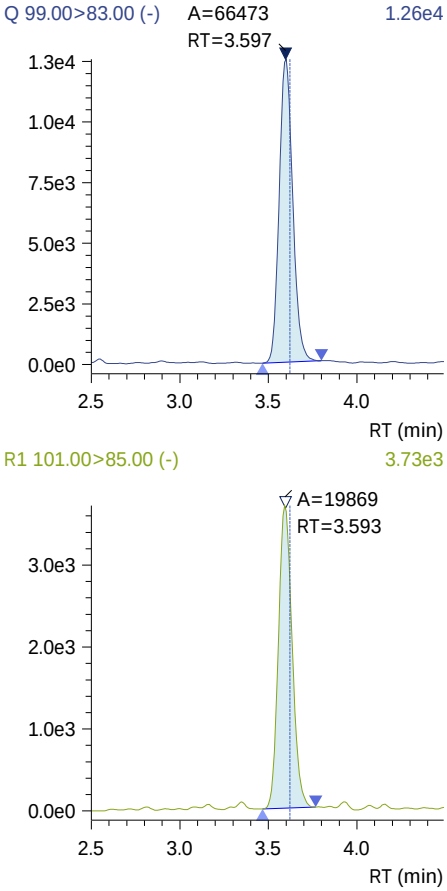
ICS

Sample ID: ICS
Date Acquired: 8/3/2023 9:16:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.597	66473	410346	1.0985	ng/mL	101.00 >85.00	29.89	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.594	4103 46	410346	1.0000	ng/mL	----	----	

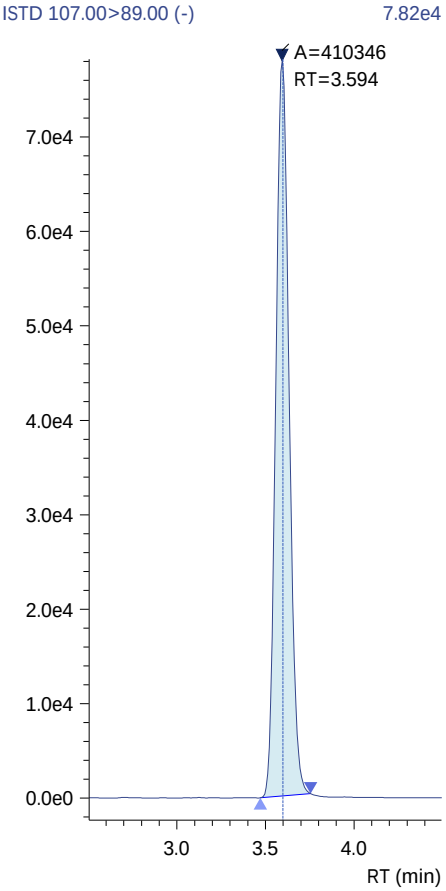
Perchlorate

Conc 1.0985
R#1 29.89 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

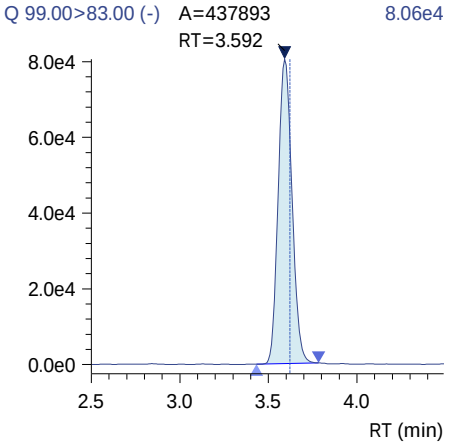
CCV

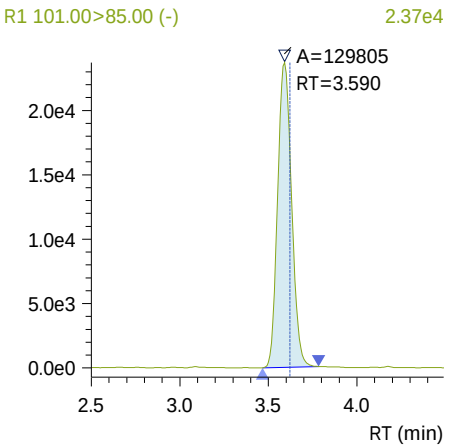
Sample ID: CCV
Date Acquired: 8/3/2023 9:22:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-004.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.592	437893	299309	9.9213	ng/mL	101.00 >85.00	29.64	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.589	299309	299309	1.0000	ng/mL	----	----	

Perchlorate

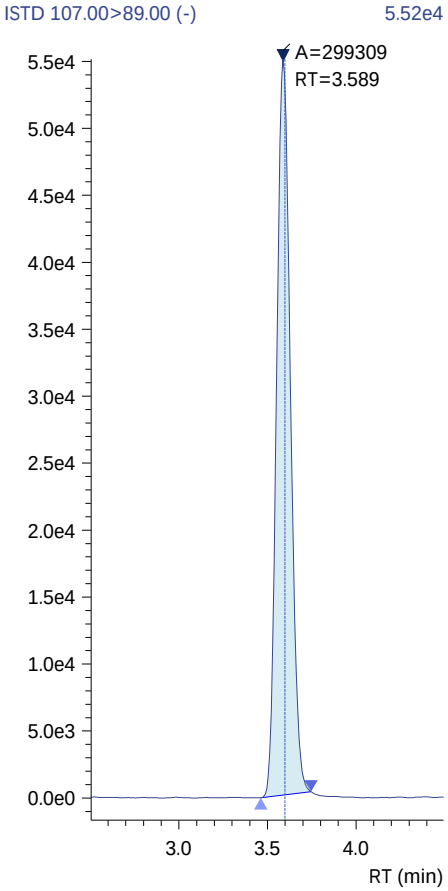
Conc 9.9213
R#1 29.64 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

EQ2300376-01

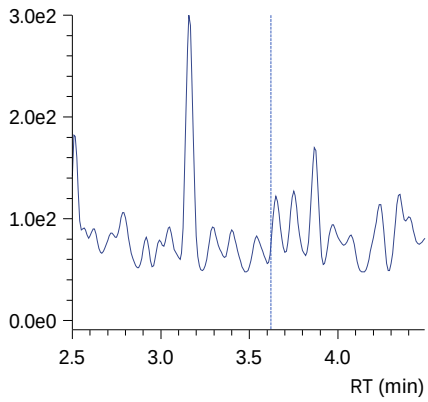
Sample ID: EQ2300376-01
Date Acquired: 8/3/2023 9:35:18 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-005.lcd
Vial: 21 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	347687	----	ng/mL	101.00 >85.00	0.00	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.585	347687	347687	1.0000	ng/mL	----	----	

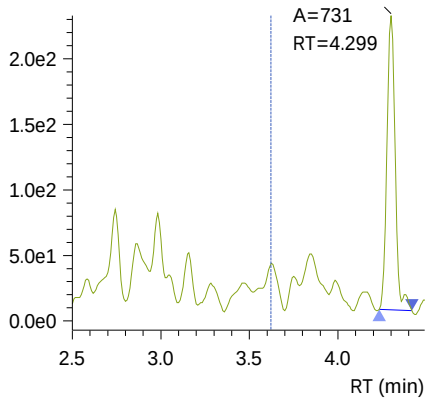
Perchlorate

Conc ----
R#1 0.00 (28.27)

Q 99.00>83.00 (-) 3.00e2



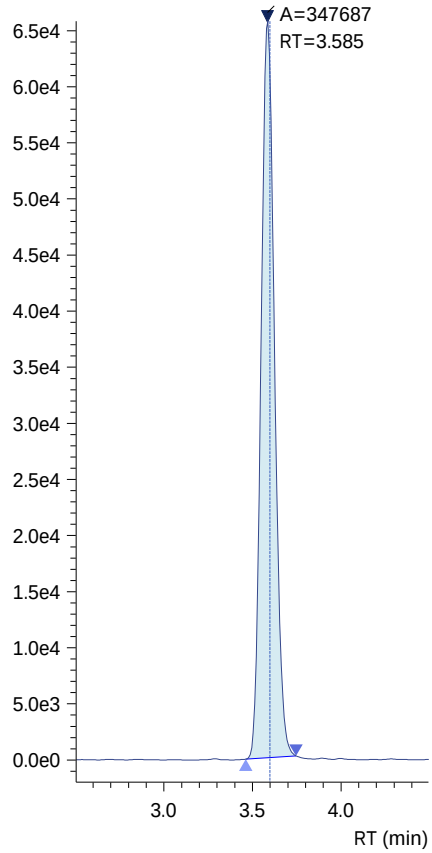
R1 101.00>85.00 (-) 2.33e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.58e4



Insight Report

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EQ2300376-02

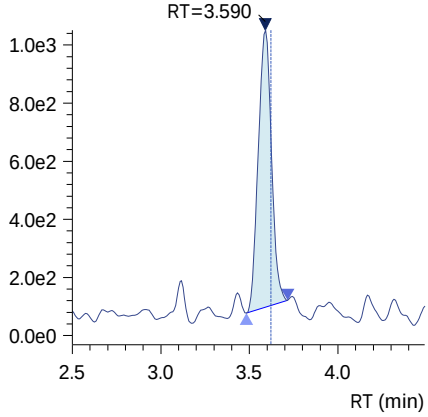
Sample ID: EQ2300376-02
Date Acquired: 8/3/2023 9:40:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-006.lcd
Vial: 22 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	4971	339111	0.0994	ng/mL	101.00 >85.00	33.46	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.582	3391 11	339111	1.0000	ng/mL	----	----	

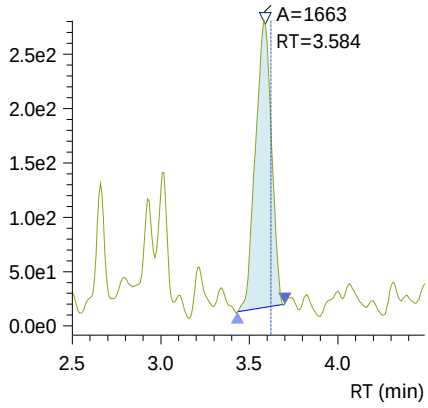
Perchlorate

Conc 0.0994
R#1 33.46 (28.27)

Q 99.00>83.00 (-) A=4971 RT=3.590 1.05e3



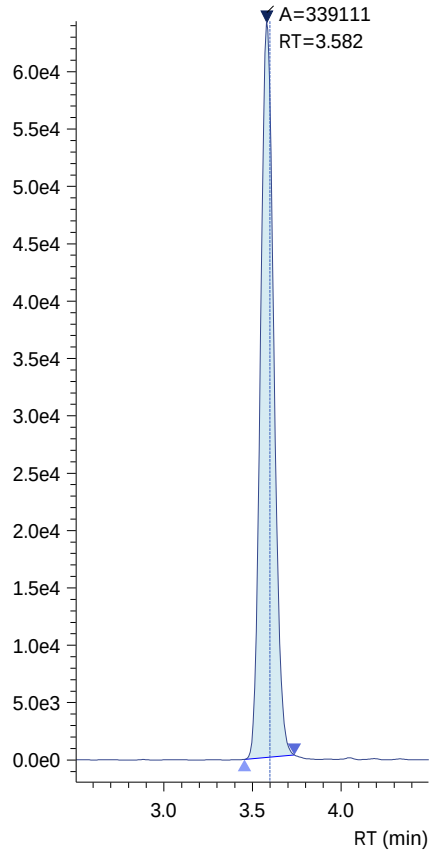
R1 101.00>85.00 (-) 2.81e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.44e4



Insight Report

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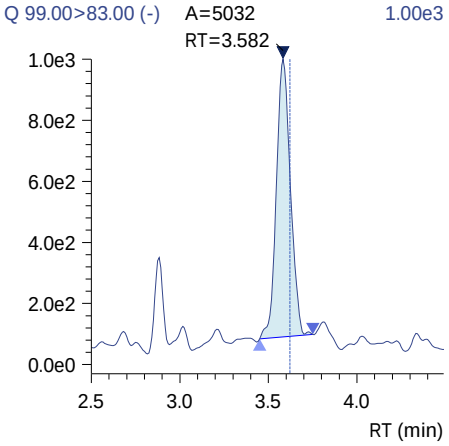
EQ2300376-03

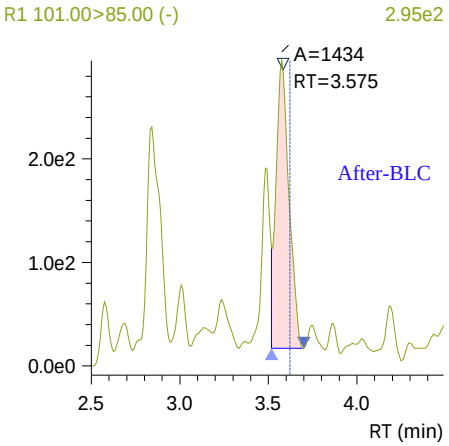
Sample ID: EQ2300376-03
Date Acquired: 8/3/2023 9:46:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-007.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.582	5032	340973	0.1001	ng/mL	101.00 >85.00	28.49	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.580	3409 73	340973	1.0000	ng/mL	----	----	

Perchlorate

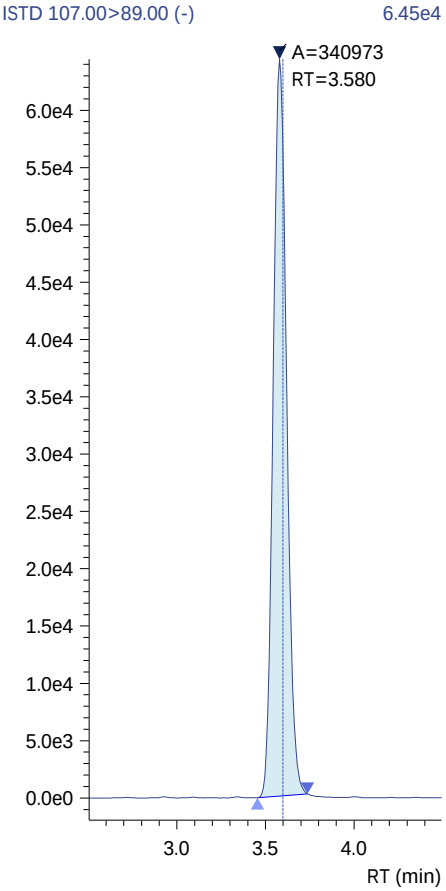
Conc 0.1001
R#1 28.49 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:23:13 PM

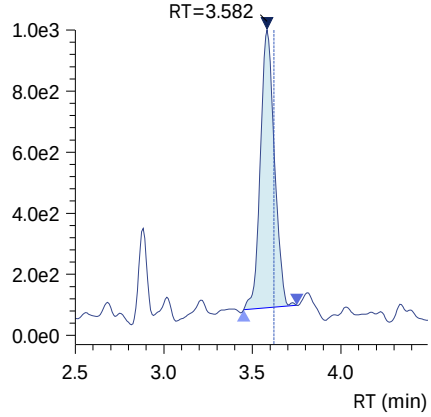
EQ2300376-03

Sample ID: EQ2300376-03
Date Acquired: 8/3/2023 9:46:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-007.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 3

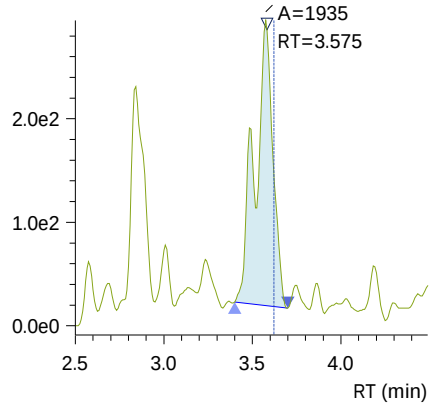
Perchlorate

Conc 0.1001
R#1 38.46 (28.27)

Q 99.00>83.00 (-) A=5032 1.00e3



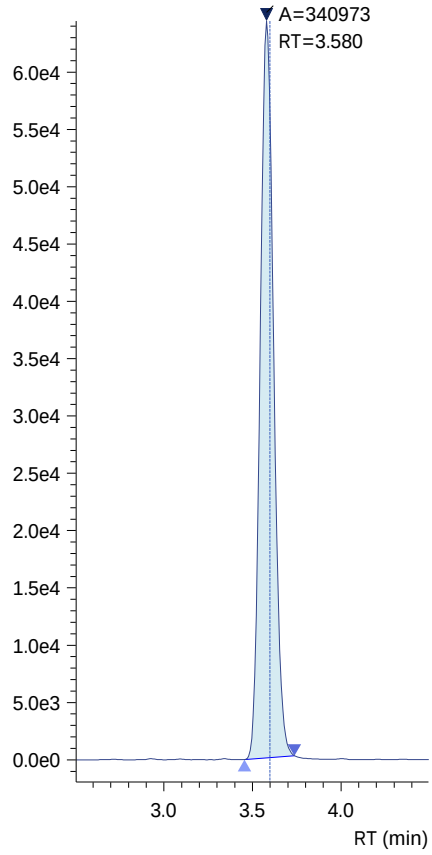
R1 101.00>85.00 (-) 2.95e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.45e4



Insight Report

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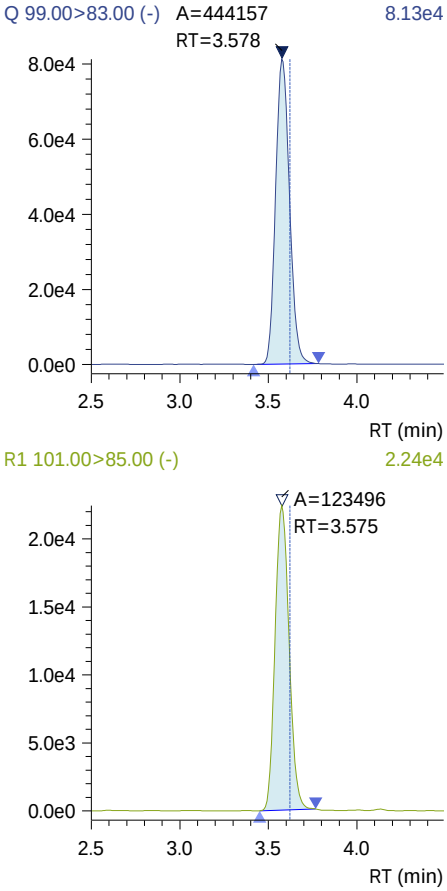
CCV

Sample ID: CCV
Date Acquired: 8/3/2023 10:25:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-014.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	444157	294179	10.2387	ng/mL	101.00 >85.00	27.81	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.574	294179	294179	1.0000	ng/mL	----	----	

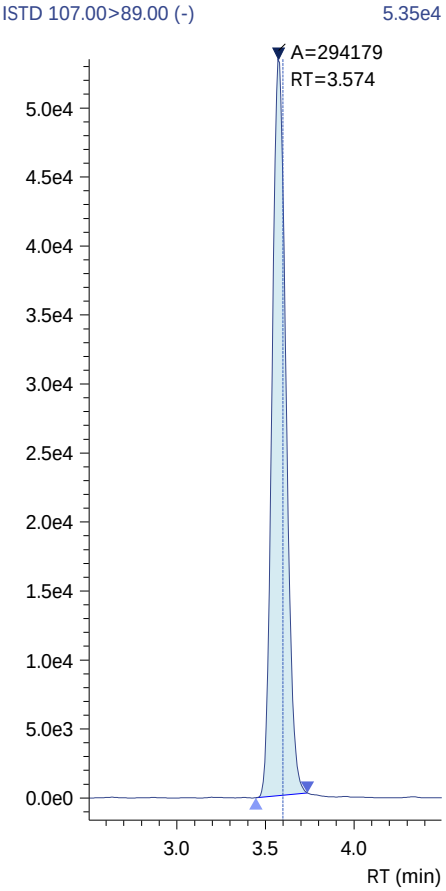
Perchlorate

Conc 10.2387
R#1 27.81 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

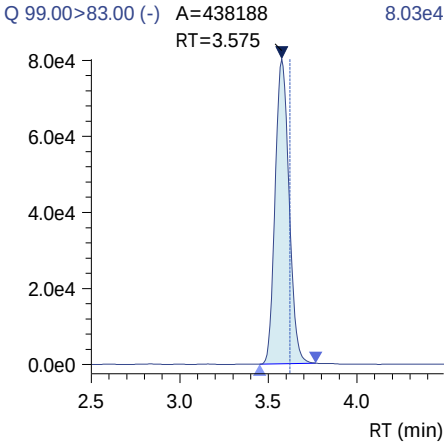
CCV

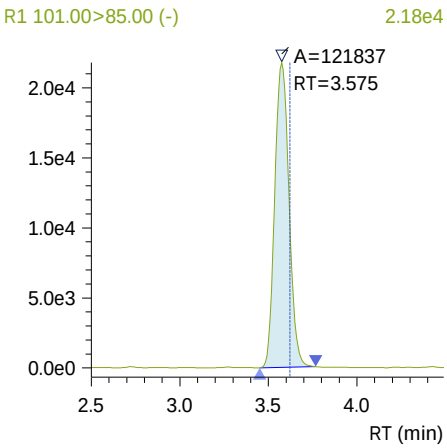
Sample ID: CCV
Date Acquired: 8/3/2023 11:26:04 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-025.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	438188	293305	10.13 12	ng/mL	101.00 >85.00	27.81	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.572	293305	293305	1.0000	ng/mL	----	----	

Perchlorate

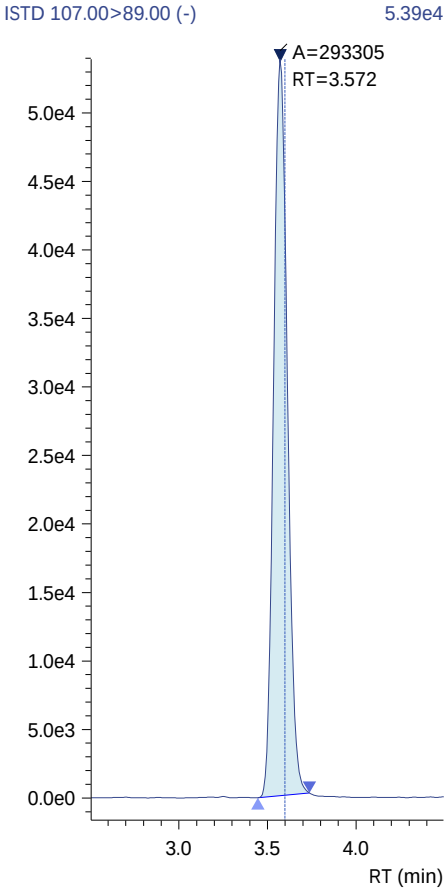
Conc 10.1312
R#1 27.81 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

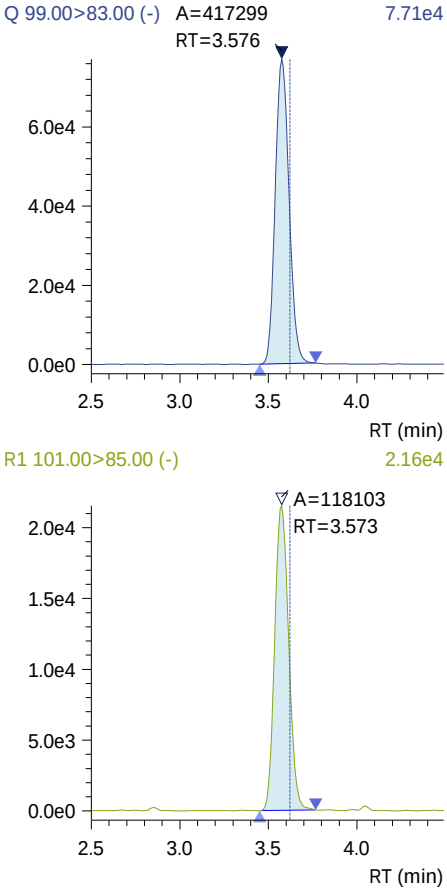
E2300707-001

Sample ID: E2300707-001
Date Acquired: 8/3/2023 11:31:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-026.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	417299	308820	9.1635	ng/mL	101.00 >85.00	28.30	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.571	308820	308820	1.0000	ng/mL	----	----	

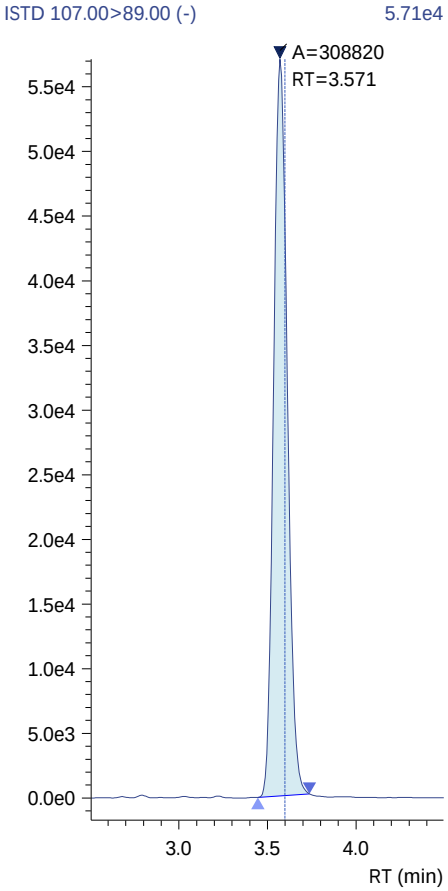
Perchlorate

Conc 9.1635
R#1 28.30 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

E2300707-002x10

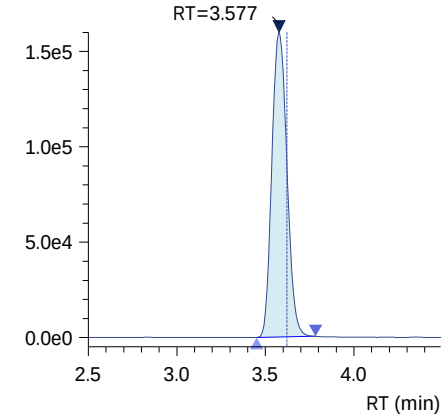
Sample ID: E2300707-002
Date Acquired: 8/3/2023 11:37:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-027.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	948321	227047	28.3244	ng/mL	101.00 >85.00	28.09	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.572	227047	227047	1.0000	ng/mL	----	----	

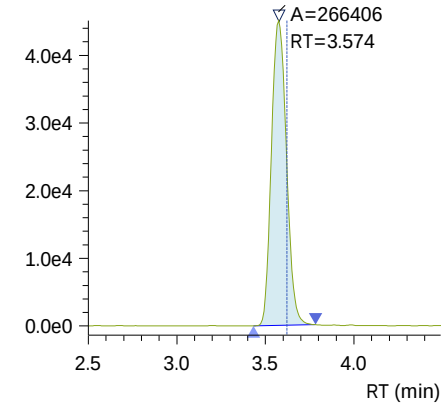
Perchlorate

Conc 28.3244
R#1 28.09 (28.27)

Q 99.00>83.00 (-) A=948321 1.60e5



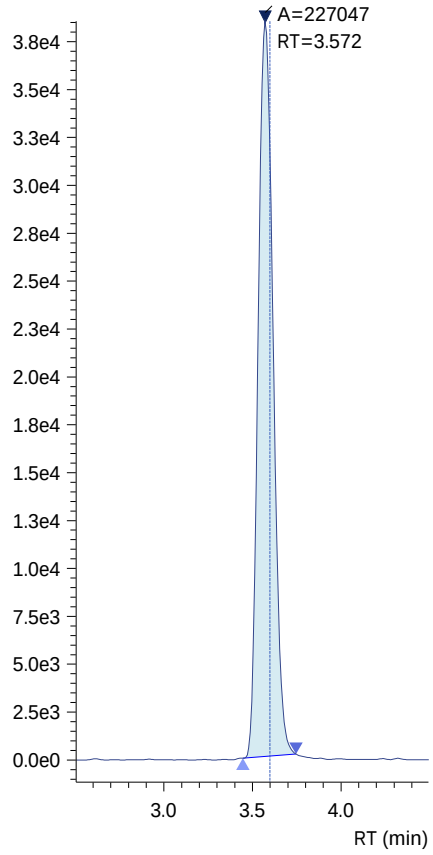
R1 101.00>85.00 (-) 4.51e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.86e4



Insight Report

Printed at 8/3/2023 12:22:11 PM

CCV

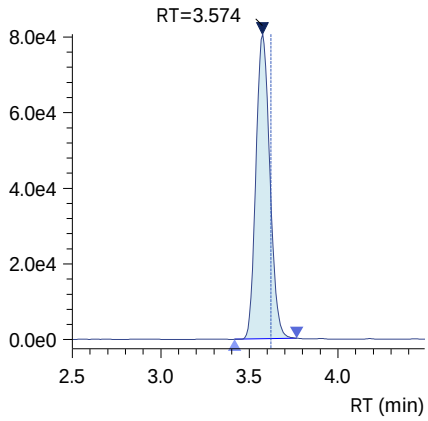
Sample ID: CCV
Date Acquired: 8/3/2023 12:04:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-032.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	4402 11	294279	10.14 43	ng/mL	101.00 >85.00	27.81	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.571	2942 79	294279	1.0000	ng/mL	----	----	

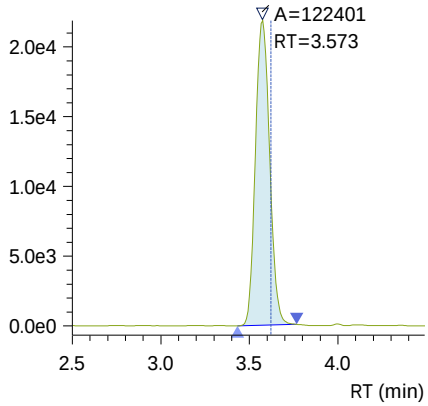
Perchlorate

Conc 10.1443
R#1 27.81 (28.27)

Q 99.00>83.00 (-) A=440211 8.08e4



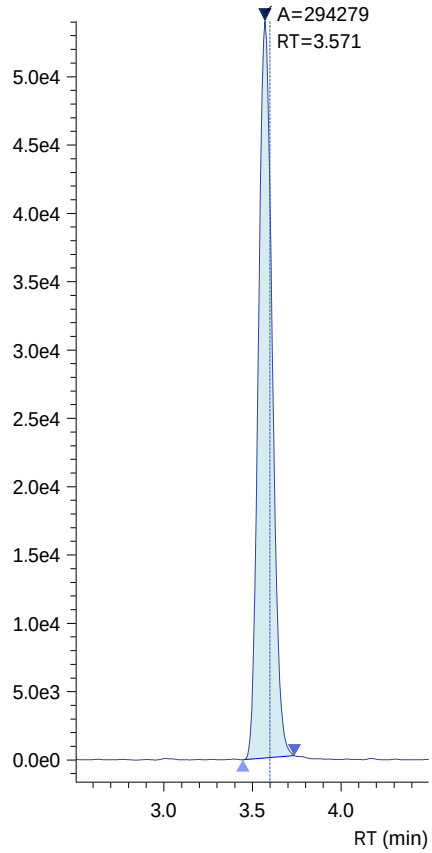
R1 101.00>85.00 (-) 2.19e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.41e4



HS23080100 Wetchem NIT-AMM_W- E350.3 - ISE

ALS WO# HS23080100

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

NI I AMMLW_ISE
NI I AMM N_E3503 ISE

Logbook **3230**

Ion Selective Electrode Logbook

Analyst:	NS			Date:	05/03/23
Method: SM4500NH3-D/EPA 350.3 or SM4500 NH3 B-F					
Probe Calibration Date: ~~NH3-5~~ 05/03/23		Cal Std ID: 322/4401-06		Probe ID:	NH3-3
Std Level		mV	Conc., mg/L:	Sodium Thiosulfate ID:	—
STD 1 (mg/L):	.2	122.7	0.203	Std Level / mV / Conc., mg/L:	
STD 2 (mg/L):	1	93.7	1.008	STD 4 (mg/L):	39.6 / 10.002
STD 3 (mg/L):	5	56.4	5.010	STD 5 (mg/L):	-8.2 / 60.000
LSC / MS Spike ID:	5122607594			ICAL Date & Slope:	97.8%/-55.4
ICV Cal STD ID:	322/4401				
DPD Reagent ID:	3130607513				

WO # / SX #	Bottle #	Initial g or ml	Final Vol. ml	Dilution Factor	Initial Conc. mg/L	Final Conc. mg/L	Chlorine Check (+/–)	Comments
ICV		50mL	50mL		9.742			
ICB					0.004			
MBLK					0.007			
LCS					8.512			
H23071866-01					0.856		-	
1866-01MS					10.655			
1866-01MSD					10.722			
1866-02					9.028			
1866-03					14.794			
1866-04					9.924			
1866-05					12.575			
1866-06					2.334			
CCV					9.822			
CCB					0.008			
1866-07					1.176		-	
1866-08					0.735			
1859-01					8.660			
1867-01					13.722			
443-20					~~9.004~~	0.001		MB 05/03/23
1821-01					0.979			
734-01					33.520		+	
735-01					17.818		-	
831-01					1.180			
CCV2					9.611			
CCB2					0.009			

Batch ID:	Reported By:	Reviewed By:
443/27, 443/24	AB	

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ANALYTICAL CHEMISTRY & TESTING SERVICES

ISE
ISE 350.3

Logbook **32303**

Ion Selective Electrode Logbook

Analyst:					Date:			
Method: SM4500NH3-D/EPA 350.3 or SM4500 NH3 B-F								
Probe Calibration Date:		Cal Std ID: on page 64			Probe ID:			
Std Level		mV	Conc., mg/L:		Sodium Thiosulfate ID:			
STD 1 (mg/L):					Std Level	mV	Conc., mg/L:	
STD 2 (mg/L):					STD 4 (mg/L):			
STD 3 (mg/L):					STD 5 (mg/L):			
LSC / MS Spike ID:					ICAL Date & Slope:			
ICV Cal STD ID:								
DPD Reagent ID:								

WO # / SX #	Bottle #	Initial g or ml	Final Vol. ml	Dilution Factor	Initial Conc. mg/L	Final Conc. mg/L	Chlorine Check (+/–)	Comments
HS23X80122-01		50mL	50mL		6.948			
1610-01					13.681			
1724-01					11.834			
1831-01					13.549			
1932-01					14.547			
2001-01					10.916			
ccv 3					9.973			
ccb 3					0.009			

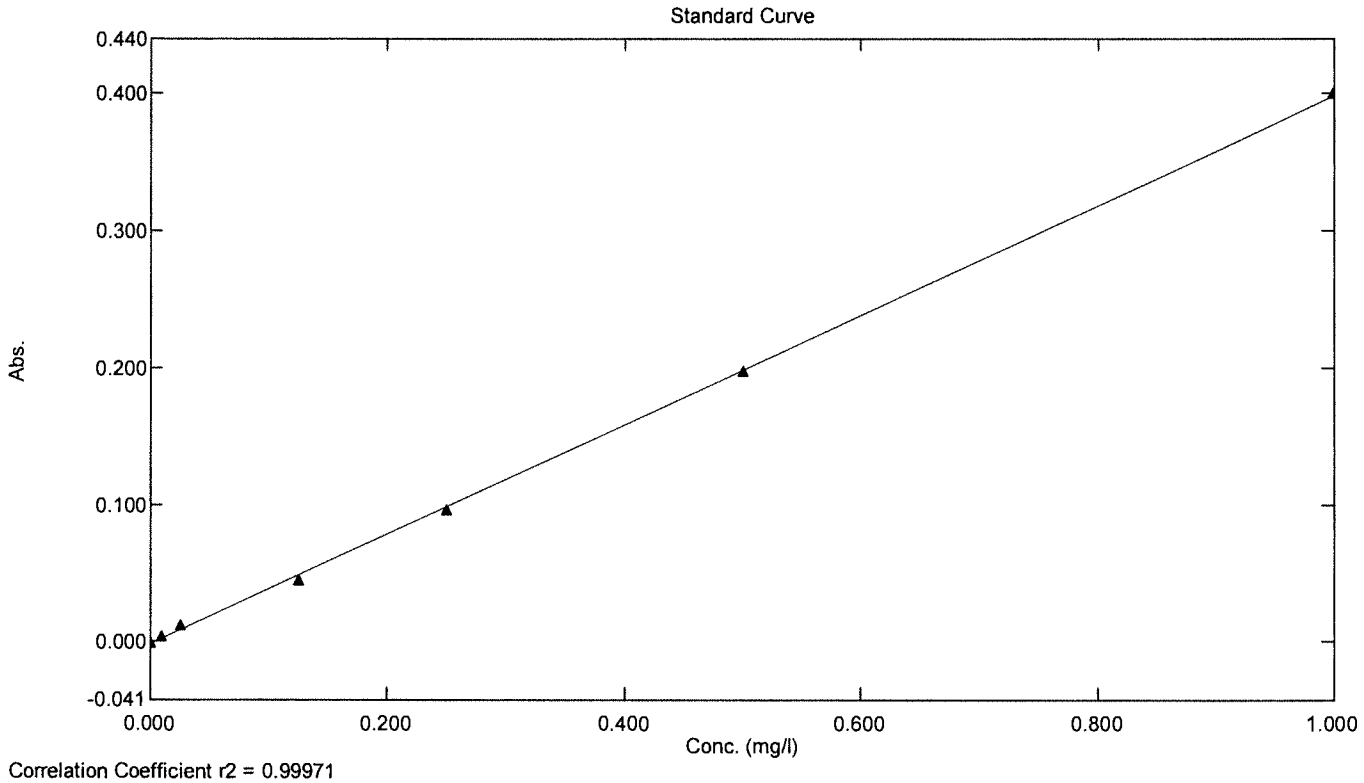
HS23080100 Wetchem P-ORTHO

ALS WO# HS23080100

Standard Table Report

08/08/2023 05:42:28 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\P_ORTHO (365.3 METHOD)\2023\08022023_P_ORTHO_W.pho



Correlation Coefficient r2 = 0.99971

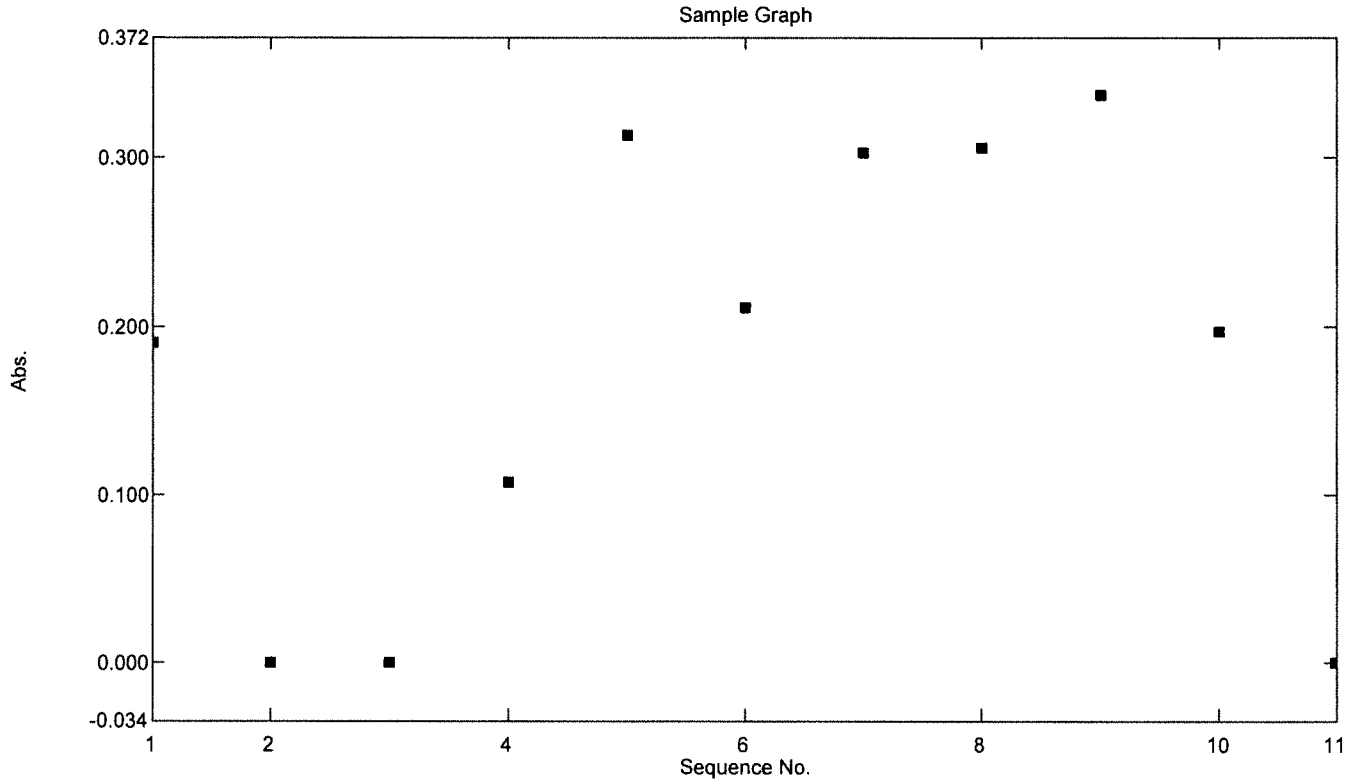
Standard Table

	Sample ID	Type	Ex	Conc	WL650.0	Wgt.Factor	Comments
1	STD1	Standard		0.000	-0.000	1.000	
2	STD2	Standard		0.010	0.005	1.000	
3	STD3	Standard		0.025	0.012	1.000	
4	STD4	Standard		0.125	0.045	1.000	
5	STD5	Standard		0.250	0.096	1.000	
6	STD6	Standard		0.500	0.197	1.000	
7	STD7	Standard		1.000	0.400	1.000	
8							

Sample Table Report

08/08/2023 05:42:30 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\P_ORTHO (365.3 METHOD)\2023\08022023_P_ORTHO_W.pho



Sample Table

	Sample ID	Date	Time	Conc	WL650.	Comments
1	CCV	08/02/2023	05:00:37 PM	0.479	0.190	322143009 WC-23
2	CCB	08/02/2023	05:00:47 PM	0.003	0.000	
3	MBLK	08/02/2023	05:00:52 PM	0.003	0.000	
4	LCS	08/02/2023	05:01:25 PM	0.272	0.108	322143008 WC-24
5	HS23080098.01	08/02/2023	05:02:06 PM	0.787	0.313	11N 3100606911
6	HS23080098.02	08/02/2023	05:02:33 PM	0.532	0.211	A.MOLYBDATE 322143903
7	HS23080098.02MS	08/02/2023	05:03:05 PM	0.762	0.303	A.ACID 322143902
8	HS23080098.02MSD	08/02/2023	05:03:17 PM	0.768	0.306	
9	HS23080100.01	08/02/2023	05:04:49 PM	0.848	0.338	DF=5X
10	CCV2	08/02/2023	05:05:09 PM	0.495	0.196	
11	CCB2	08/02/2023	05:05:19 PM	0.005	0.001	
12						

HS23080100 Wetchem TOC_W

ALS WO# HS23080100

C:\TOC-L\Data\2023_06_21_002.tlx

	Type	Analysis	Sample Nam	Sample ID	Origin	Manual Diluti	Result	Notes	Status	Date / Time
1	Standard	NPOC	CALIBRATI		06.21.2023.	1.000			Completed	6/21/2023 6:
2	Unknown	NPOC	ICV		06.21.2023.	1.000	NPOC:7.77		Completed	6/21/2023 6:
3	Unknown	NPOC	ICB		06.21.2023.	1.000	NPOC:0.01		Completed	6/21/2023 7:

C:\TOC-L\Data\2023_06_21_002.tlx

	Vial
1	60, 61, 62, 6
2	67
3	68

TOC-Control L Report

2023_06_21_002.tlx

Instr.Information

Instrument Options: TOC/ASI/IC Unit/
Catalyst: Regular Sensitivity

Cal. Curve

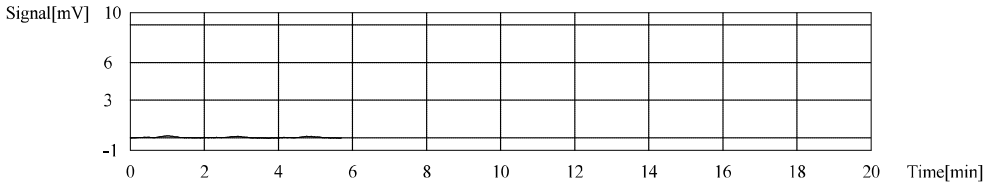
Sample Name: CALIBRATION
Sample ID:
Cal. Curve: 06.21.2023.2023_06_21_17_09_26.cal
Status: Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.3327	50uL	1.000	*******		6/21/2023 5:17:20 PM
2	0.000	50uL	1.000	*******		6/21/2023 5:19:28 PM
3	0.4000	50uL	1.000	*******		6/21/2023 5:21:36 PM

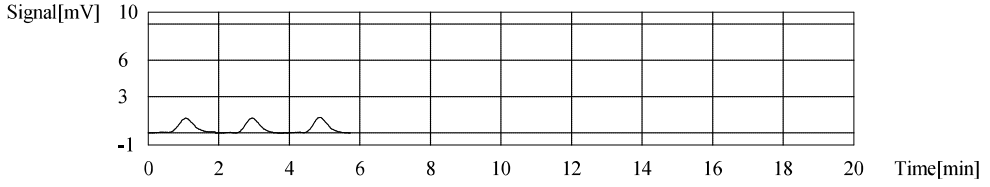
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 0.2442



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.239	50uL	1.000	*******		6/21/2023 5:29:24 PM
2	3.486	50uL	1.000	*******		6/21/2023 5:31:35 PM
3	3.544	50uL	1.000	*******		6/21/2023 5:33:43 PM

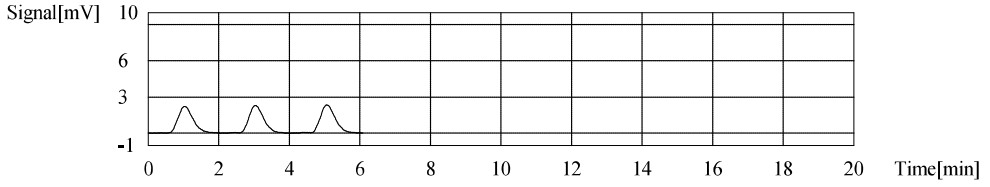
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 3.423



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	6.496	50uL	1.000	*******		6/21/2023 5:41:39 PM
2	6.578	50uL	1.000	*******		6/21/2023 5:43:54 PM
3	6.676	50uL	1.000	*******		6/21/2023 5:46:11 PM

Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 6.583



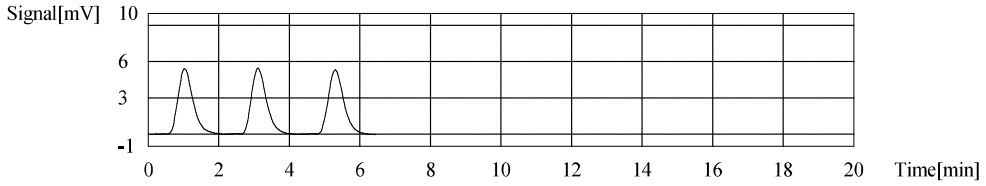
TOC-Control L Report

2023_06_21_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.80	50uL	1.000	*******		6/21/2023 5:54:11 PM
2	15.85	50uL	1.000	*******		6/21/2023 5:56:36 PM
3	16.15	50uL	1.000	*******		6/21/2023 5:59:02 PM

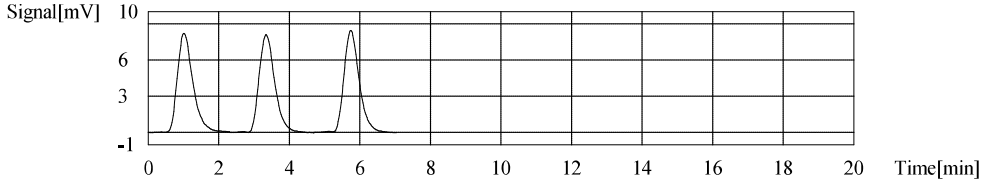
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 15.93



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	24.91	50uL	1.000	*******		6/21/2023 6:07:14 PM
2	24.77	50uL	1.000	*******		6/21/2023 6:09:54 PM
3	25.05	50uL	1.000	*******		6/21/2023 6:12:28 PM

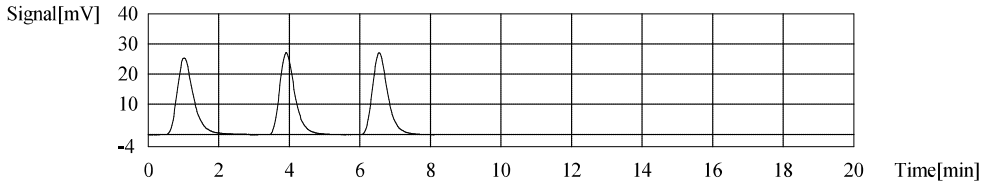
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 24.91



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	80.93	50uL	1.000	*******		6/21/2023 6:21:15 PM
2	81.18	50uL	1.000	*******		6/21/2023 6:24:07 PM
3	81.22	50uL	1.000	*******		6/21/2023 6:26:57 PM

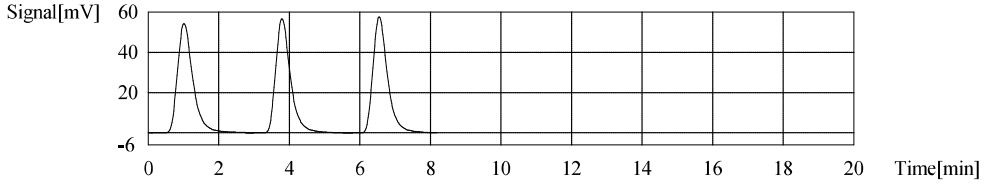
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 81.11



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	163.2	50uL	1.000	*******		6/21/2023 6:35:37 PM
2	164.6	50uL	1.000	*******		6/21/2023 6:38:38 PM
3	165.0	50uL	1.000	*******		6/21/2023 6:41:31 PM

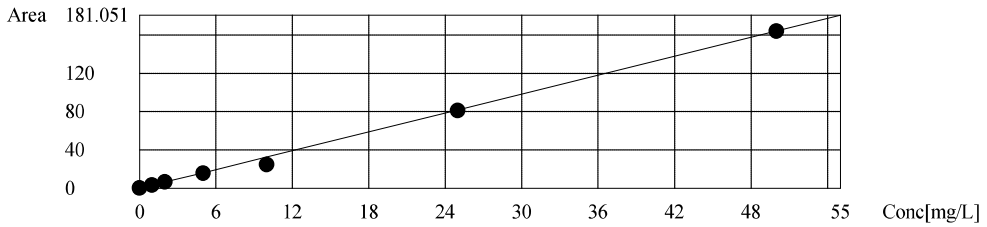
Acid Add. 0.000%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 164.3



TOC-Control L Report

2023_06_21_002.tlx

Slope:	3.292
Intercept	0.000
r^2	0.9976
r	0.9988
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name: ICV
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

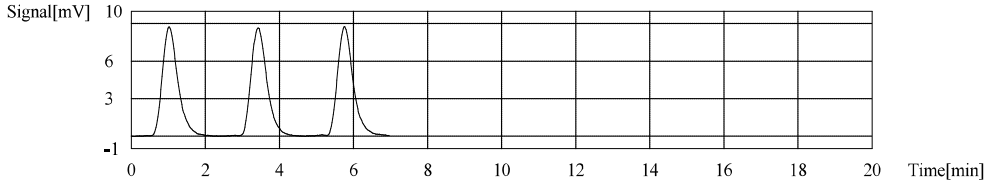
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.778mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.58	7.771mg/L	50uL	1.000		06.21.2023.2023_06_21_17_09_26.cal	6/21/2023 6:49:49 PM
2	25.53	7.756mg/L	50uL	1.000		06.21.2023.2023_06_21_17_09_26.cal	6/21/2023 6:52:22 PM
3	25.70	7.807mg/L	50uL	1.000		06.21.2023.2023_06_21_17_09_26.cal	6/21/2023 6:54:51 PM

Mean Area	25.60
Mean Conc.	7.778mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01449mg/L

1. Det

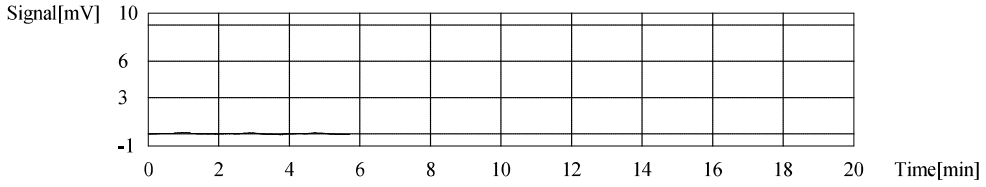
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	50uL	1.000		06.21.2023.2023_06_21_17_09_26.cal	6/21/2023 7:02:39 PM
2	0.000	0.000mg/L	50uL	1.000		06.21.2023.2023_06_21_17_09_26.cal	6/21/2023 7:04:47 PM
3	0.1431	0.04347mg/L	50uL	1.000		06.21.2023.2023_06_21_17_09_26.cal	6/21/2023 7:06:55 PM

TOC-Control L Report

2023_06_21_002.tlx

Mean Area	0.04770
Mean Conc.	0.01449mg/L



C:\TOC-L\Data\2023_08_07_001.tlx

	Sample Name	Sample ID	Result	Status	Date / Time	Vial
1	CCV	322144508	NPOC:24.9	Completed	8/7/2023 12:47:	1
2	CCB		NPOC:0.12	Completed	8/7/2023 12:59:	2
3	MBLK-08072023		NPOC:0.10	Completed	8/7/2023 1:11:0	3
4	LCS-08072023	3100606518	NPOC:9.99	Completed	8/7/2023 1:24:5	4
5	LCSD-08072023		NPOC:10.1	Completed	8/7/2023 1:38:5	5
6	HS23080100-01DF10	TOC_W	NPOC:7.40	Completed	8/7/2023 1:51:4	6
7	HS23071496-03		NPOC:21.0	Completed	8/7/2023 2:05:1	7
8	HS23080362-01		NPOC:4.31	Completed	8/7/2023 2:18:2	8
9	HS23080362-01MS		NPOC:14.4	Completed	8/7/2023 2:32:0	9
10	HS23080362-02		NPOC:6.00	Completed	8/7/2023 2:45:2	10
11	HS23080362-03		NPOC:4.84	Completed	8/7/2023 2:58:3	11
12	HS23080362-04		NPOC:3.40	Completed	8/7/2023 3:11:2	12
13	CCV	322144508	NPOC:25.5	Completed	8/7/2023 3:25:5	1
14	CCB		NPOC:0.16	Completed	8/7/2023 3:37:5	2
15	HS23080362-05		NPOC:16.3	Completed	8/7/2023 3:51:3	13
16	HS23080362-06		NPOC:6.70	Completed	8/7/2023 4:04:3	14
17	HS23080115-01	TOC_W 5310B	NPOC:16.1	Completed	8/7/2023 4:18:0	15
18	HS23080206-01		NPOC:4.73	Completed	8/7/2023 4:31:0	16
19	CCV	322144508	NPOC:25.0	Completed	8/7/2023 4:45:2	1
20	CCB		NPOC:0.17	Completed	8/7/2023 4:57:2	2

TOC-Control L Report

2023_08_07_001.tlx

Instr.Information

Instrument Options TOC/ASI/IC Unit/
Catalyst Regular Sensitivity

Sample

Sample Name: CCV
Sample ID: 322144508
Origin: 06.21.2023.cal
Status Completed
Chk. Result

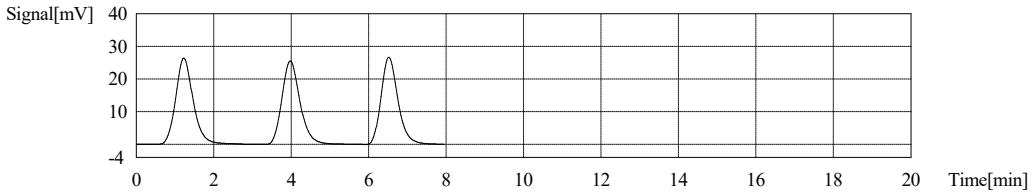
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.74	24.95mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 12:41:21 PM
2	82.42	25.16mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 12:44:13 PM
3	80.88	24.69mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 12:47:04 PM

Mean Area 81.68
Mean Conc. 24.93mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1228mg/L

1. Det

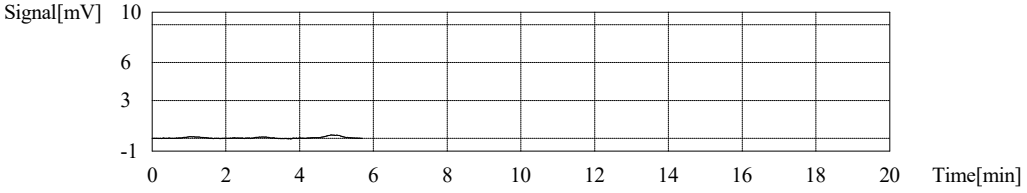
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3051	0.09313mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 12:54:50 PM
2	0.2511	0.07664mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 12:56:57 PM
3	0.6511	0.1987mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 12:59:05 PM

TOC-Control L Report

2023_08_07_001.tlx

Mean Area 0.4024
Mean Conc. 0.1228mg/L



Sample

Sample Name: MBLK-08072023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

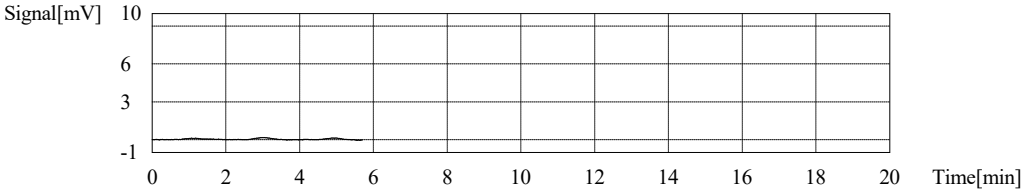
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1009mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2461	0.07512mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:06:50 PM
2	0.5381	0.1642mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:08:58 PM
3	0.2075	0.06334mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:11:06 PM

Mean Area 0.3306
Mean Conc. 0.1009mg/L



Sample

Sample Name: LCS-08072023
Sample ID: 3100606518
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.999mg/L

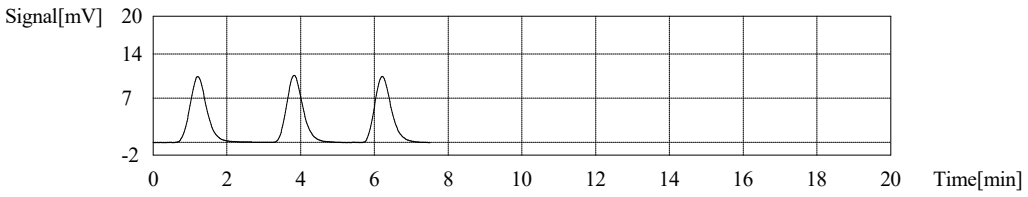
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.87	10.03mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:19:38 PM
2	32.56	9.938mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:22:17 PM
3	32.85	10.03mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:24:58 PM

TOC-Control L Report

Mean Area 32.76
Mean Conc. 9.999mg/L



Sample

Sample Name: LCSD-08072023
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

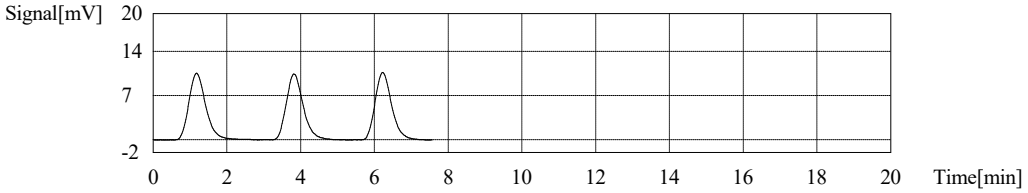
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.13mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.33	10.17mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:33:28 PM
2	33.10	10.10mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:36:08 PM
3	33.15	10.12mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:38:52 PM

Mean Area 33.19
Mean Conc. 10.13mg/L



Sample

Sample Name: HS23070100-01DF10
Sample ID: TOC_W
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.403mg/L

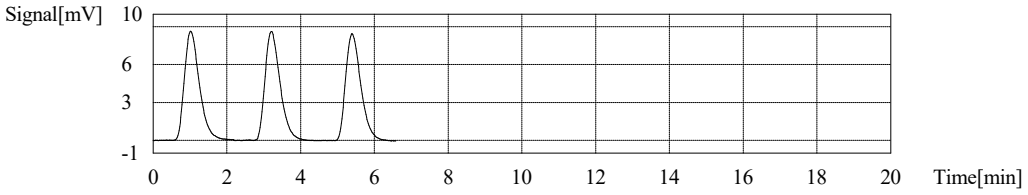
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.17	7.377mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:46:54 PM
2	24.49	7.475mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:49:20 PM
3	24.10	7.356mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 1:51:47 PM

TOC-Control L Report

Mean Area 24.25
Mean Conc. 7.403mg/L



Sample

Sample Name: HS23080362-01
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

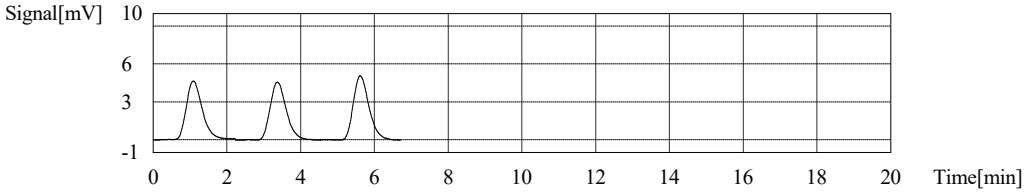
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.316mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	13.70	4.182mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 2:13:22 PM
2	13.74	4.194mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 2:15:54 PM
3	14.98	4.572mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 2:18:20 PM

Mean Area 14.14
Mean Conc. 4.316mg/L



Sample

Sample Name: HS23080362-01MS
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.43mg/L

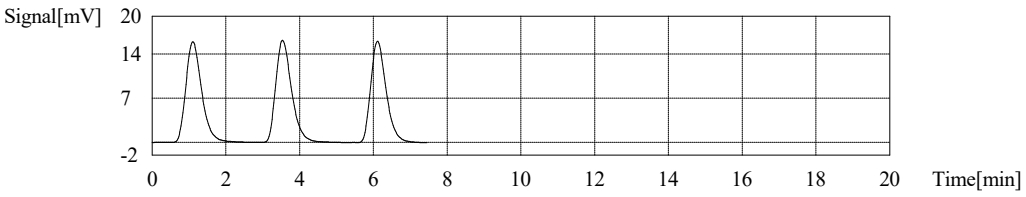
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.15	14.39mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 2:26:39 PM
2	48.12	14.69mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 2:29:28 PM
3	46.58	14.22mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 2:32:08 PM

TOC-Control L Report

Mean Area 47.28
Mean Conc. 14.43mg/L



Sample

Sample Name: CCV
Sample ID: 322144508
Origin: 06.21.2023.cal
Status Completed
Chk. Result

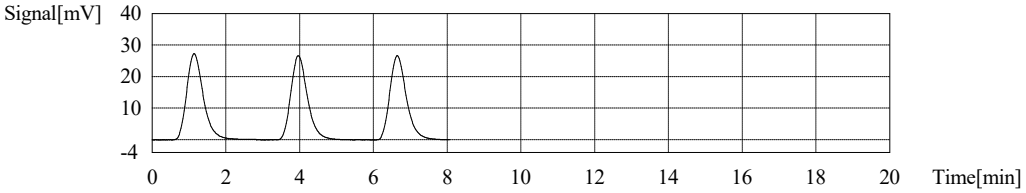
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.55mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	85.04	25.96mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 3:20:12 PM
2	83.07	25.36mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 3:23:09 PM
3	83.04	25.35mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 3:25:57 PM

Mean Area 83.72
Mean Conc. 25.55mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1648mg/L

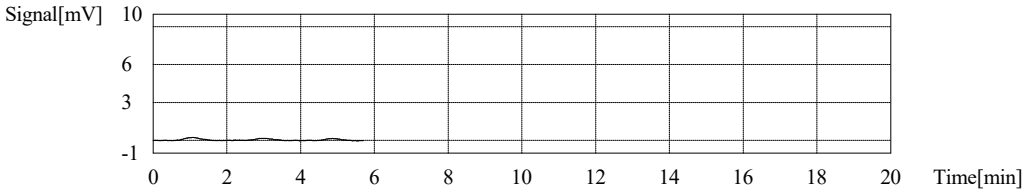
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6658	0.2032mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 3:33:42 PM
2	0.4883	0.1490mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 3:35:50 PM
3	0.4652	0.1420mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 3:37:58 PM

TOC-Control L Report

Mean Area 0.5398
Mean Conc. 0.1648mg/L



Sample

Sample Name: CCV
Sample ID: 322144508
Origin: 06.21.2023.cal
Status Completed
Chk. Result

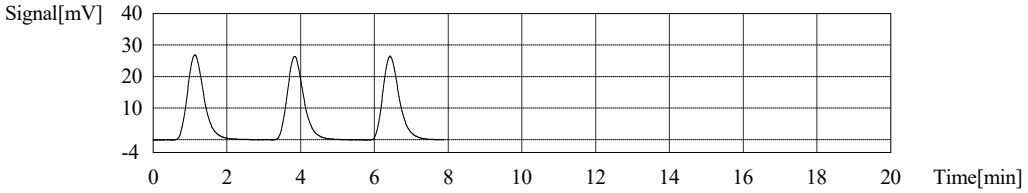
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.07mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.33	25.43mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 4:39:45 PM
2	81.40	24.85mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 4:42:38 PM
3	81.70	24.94mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 4:45:26 PM

Mean Area 82.14
Mean Conc. 25.07mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06.21.2023.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1796mg/L

1. Det

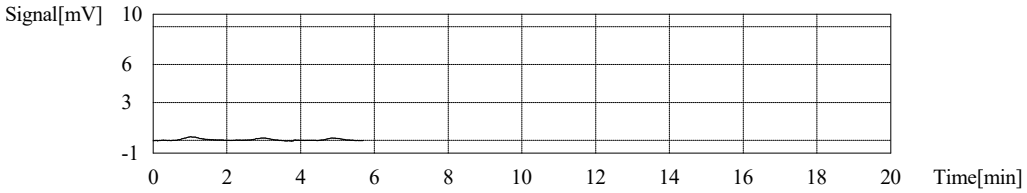
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7330	0.2237mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 4:53:11 PM
2	0.5043	0.1539mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 4:55:19 PM
3	0.5284	0.1613mg/L	50uL	1.000		06.21.2023.2023_06_22_09_52_59.cal	8/7/2023 4:57:26 PM

TOC-Control L Report

2023_08_07_001.tlx

Mean Area	0.5886
Mean Conc.	0.1796mg/L



HS23080100-E2300707 Perchlorate Final Report IV

ALS WO# HS23080100

August 03, 2023 Service Request No:E2300707

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080100

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 02, 2023
For your reference, these analyses have been assigned our service request number **E2300707.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300707
Project:	HS23080100	**Date Received:**	08/02/2023
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Two samples were received for analysis at ALS Environmental in Houston on 08/02/2023.

The samples were received in good condition and is consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300376: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300707
Project: HS23080100

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300707-001	LH18/24-SP650_080123_AIX	8/1/2023	1300
E2300707-002	LH18/24-SP650_080123_BIX	8/1/2023	1300

Service Request Summary

Folder #: **E2300707**
Client Name: ALS Environmental - US
Project Name: HS23080100
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080100
EDD: BASIC_WQC_CASNo_LOD

2 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300707-001	LH18/24-SP650_080123_AIX	Water	08/01/23 1300	**IV**
E2300707-002	LH18/24-SP650_080123_BIX	Water	08/01/23 1300	**IV**

Service Request Summary

Folder #: **E2300707**
Client Name: ALS Environmental - US
Project Name: HS23080100
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/3/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080100
EDD: BASIC_WQC_CASNo_LOD

2 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

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ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

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Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22574

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080100
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080100-02**	**LH18/24-SP650_080123_AIX**	**Water**	**01 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			03 Aug 2023
2.	**HS23080100-03**	**LH18/24-SP650_080123_BIX**	**Water**	**01 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			03 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: NR Date/Time:

Received By: Date/Time: 8.2.23 1045

Cooler ID(s): Temperature(s):

Cooler Receipt Form

ALS Environmental

Project Chemist JG

Client/Project ALS

Thermometer ID 1231

Date/Time Received: 8-2-23 Initials: LJ

Date/Time Logged in: 8.2.23 Initials LJ

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No If yes, how many and where?

Were they intact? ○ Yes ○ No ☒ N/A

Were they signed and dated? ○ Yes ○ No ☒ N/A

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-2-23	1049	LJ	5.2	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

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Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

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Phone (281)530-5656 Fax (281)530-5887
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Preparation Information Benchsheet

Prep Run#: 424032 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/2/23 08:32

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300694-001	OBFOD-MW01	.01	6850/ClO4 DOD			Water	10mL	
2	E2300694-002	OBFOD-3	.01	6850/ClO4 DOD			Water	10mL	
3	E2300694-003	JOD-MW01	.02	6850/ClO4 DOD			Water	10mL	
4	E2300694-004	JOD-MW04	.01	6850/ClO4 DOD			Water	10mL	
5	E2300695-001	OBFOB-MW02	.01	6850/ClO4 DOD			Water	10mL	
6	E2300695-002	OBFOB-MW03	.01	6850/ClO4 DOD			Water	10mL	
7	E2300695-003	OBFOB-MW01	.01	6850/ClO4 DOD			Water	10mL	
8	E2300695-004	OBF-2	.01	6850/ClO4 DOD			Water	10mL	
9	E2300695-005	OBFOD-2R	.01	6850/ClO4 DOD			Water	10mL	
10	E2300695-006	OBFOD-1	.01	6850/ClO4 DOD			Water	10mL	
11	E2300695-007	DUP-01	.01	6850/ClO4 DOD			Water	10mL	
12	E2300696-001	JOD-MW02	.01	6850/ClO4 DOD			Water	10mL	
13	E2300696-002	JOD-MW03	.01	6850/ClO4 DOD			Water	10mL	
14	E2300696-003	DUP-02	.01	6850/ClO4 DOD			Water	10mL	
15	E2300707-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
16	E2300707-002	LH18/24-SP650_080123_BIX	.01	6850/ClO4 DOD			Water	10mL	
17	EQ2300376-01	MB		6850/ClO4			Liquid	10mL	
18	EQ2300376-02	LCS		6850/ClO4			Liquid	10mL	
19	EQ2300376-03	DLCS		6850/ClO4			Liquid	10mL	
20	EQ2300376-04	JOD-MW01 MS	.02	6850/ClO4 DOD			Liquid	10mL	
21	EQ2300376-05	JOD-MW01 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
22	K2308541-001	FBR-INF-073123	.01	6850/ClO4			Water	10mL	
23	K2308541-002	LGAC-INF-073123	.01	6850/ClO4			Water	10mL	
24	K2308541-003	LGAC-INT1-073123	.01	6850/ClO4			Water	10mL	
25	K2308541-004	LGAC-INT2-073123	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300376-02	1.00µL	EQ2300376-02	1.00µL	EQ2300376-03	1.00µL	EQ2300376-03	1.00µL	EQ2300376-04	1.00µL	EQ2300376-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300694-001	100.00µL	E2300694-002	100.00µL	E2300694-003	100.00µL	E2300694-004	100.00µL	E2300695-001	100.00µL	E2300695-002	100.00µL
E2300695-003	100.00µL	E2300695-004	100.00µL	E2300695-005	100.00µL	E2300695-006	100.00µL	E2300695-007	100.00µL	E2300696-001	100.00µL
E2300696-002	100.00µL	E2300696-003	100.00µL	E2300707-001	100.00µL	E2300707-002	100.00µL	EQ2300376-01	100.00µL	EQ2300376-01	100.00µL

Preparation Information Benchsheet

Prep Run#: 424032 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/2/23 08:32

EQ2300376-02	100.00µL	EQ2300376-02	100.00µL	EQ2300376-03	100.00µL	EQ2300376-03	100.00µL	EQ2300376-04	100.00µL	EQ2300376-05	100.00µL
K2308541-001	100.00µL	K2308541-002	100.00µL	K2308541-003	100.00µL	K2308541-004	100.00µL				

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/2/23 08:32
Finished: 8/2/23 11:30
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP650_080123_AIX	**Units:**	µg/L
Lab Code:	E2300707-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**9.16**		0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 11:31	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP650_080123_BIX	**Units:**	µg/L
Lab Code:	E2300707-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**283**		1.00	0.500	0.250	10	8/ 2/23	8/3/23 11:37	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300376-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 09:35	424032	812728	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300376-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0994**	J	0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 09:40	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300376-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.100**		0.100	0.0500	0.0250	1	8/ 2/23	8/3/23 09:46	424032	812728	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100
Sample Matrix: Water

Service Request: E2300707
Date Analyzed: 8/ 3/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424032

	Lab Control Sample EQ2300376-02			Duplicate Lab Control Sample EQ2300376-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0994	0.100	99	0.100	0.100	100	84 - 119	<1	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Initial Calibration

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20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : **A:**20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230802-001	Perchlorate6850c.lcm	1x		8/2/2023 13:05
2	IB		2230802-002	Perchlorate6850c.lcm	1x		8/2/2023 13:11
3	Perchlorate ICAL 1		2230802-003	Perchlorate6850c.lcm	1x	230373	8/2/2023 13:17
4	Perchlorate ICAL 2		2230802-004	Perchlorate6850c.lcm	1x	230375	8/2/2023 13:23
5	Perchlorate ICAL 3		2230802-005	Perchlorate6850c.lcm	1x	230376	8/2/2023 13:28
6	Perchlorate ICAL 4		2230802-006	Perchlorate6850c.lcm	1x	230377	8/2/2023 13:34
7	Perchlorate ICAL 5		2230802-007	Perchlorate6850c.lcm	1x	230378	8/2/2023 13:39
8	Perchlorate ICAL 6		2230802-008	Perchlorate6850c.lcm	1x	230379	8/2/2023 13:45
9	Perchlorate ICAL 7		2230802-009	Perchlorate6850c.lcm	1x	230380	8/2/2023 13:50
10	Perchlorate ICAL 8		2230802-010	Perchlorate6850c.lcm	1x	230381	8/2/2023 13:56
11	Perchlorate ICAL 9		2230802-011	Perchlorate6850c.lcm	1x	230382	8/2/2023 14:02
12	Perchlorate ICAL 10		2230802-012	Perchlorate6850c.lcm	1x	230383	8/2/2023 14:07
13	PerchlorateICV		2230802-013	Perchlorate6850c.lcm	1x	230385	8/2/2023 14:19

Initial Calibration - Detailed Report

Calibration ID: EC2300012 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300012-01	Perchlorate ICAL 1	2230802-003	08/02/2023 13:17
02	EC2300012-02	Perchlorate ICAL 2	2230802-004	08/02/2023 13:23
03	EC2300012-03	Perchlorate ICAL 3	2230802-005	08/02/2023 13:28
04	EC2300012-04	Perchlorate ICAL 4	2230802-006	08/02/2023 13:34
05	EC2300012-05	Perchlorate ICAL 5	2230802-007	08/02/2023 13:39
06	EC2300012-06	Perchlorate ICAL 6	2230802-008	08/02/2023 13:45
07	EC2300012-07	Perchlorate ICAL 7	2230802-009	08/02/2023 13:50
08	EC2300012-08	Perchlorate ICAL 8	2230802-010	08/02/2023 13:56
09	EC2300012-09	Perchlorate ICAL 9	2230802-011	08/02/2023 14:02
10	EC2300012-10	Perchlorate ICAL 10	2230802-012	08/02/2023 14:07

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.086** **Average RF = 0.1475**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1428	02	0.5000	0.1421	03	0.7000	0.1457	04	1.0000	0.149
05	2.0000	0.1515	06	5.0000	0.1475	07	10.0000	0.1503	08	20.0000	0.1477
09	30.0000	0.1485	10	50.0000	0.1496						

Analyte

Perchlorate RSE = 2.09

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0968	-3.2	02	0.5000	0.482	-3.6	03	0.7000	0.692	-1.2
04	1.0000	1.01	1.0	05	2.0000	2.05	2.7	06	5.0000	5.00	-0.0
07	10.0000	10.2	1.9	08	20.0000	20.0	0.2	09	30.0000	30.2	0.7
10	50.0000	50.7	1.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300012	**Instrument ID:**	E-LCMS-01
Datafile ID:	2230802-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300012-11	T	Average RF	10	10.670	ng/mL	6.7	<= 15

Insight Report

Printed at 8/3/2023 9:30:46 AM

Method File: I:\LCMS01\DATA\20230802\20230802ICAL.lcm
Project File: I:\LCMS01\DATA\20230802\no use\20230802ICAL.damlp

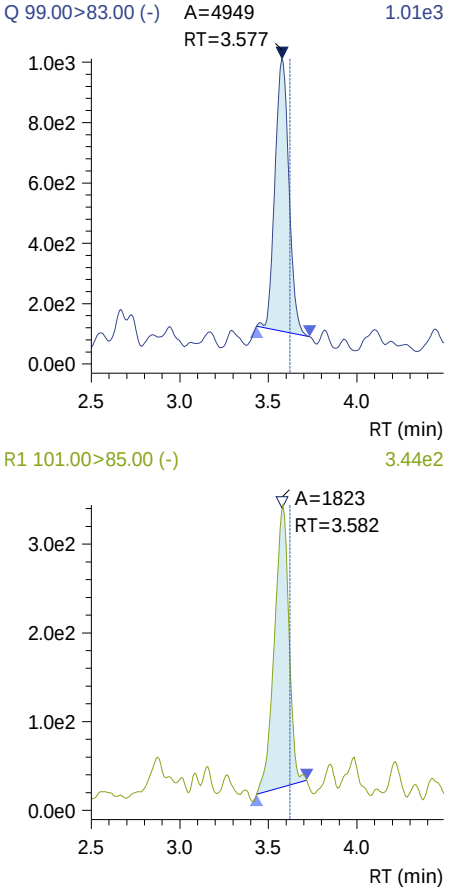
Perchlorate ICAL 1

Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	4949	346538	0.0968	ng/mL	101.00 >85.00	36.83	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.572	346538	346538	1.0000	ng/mL	----	----	

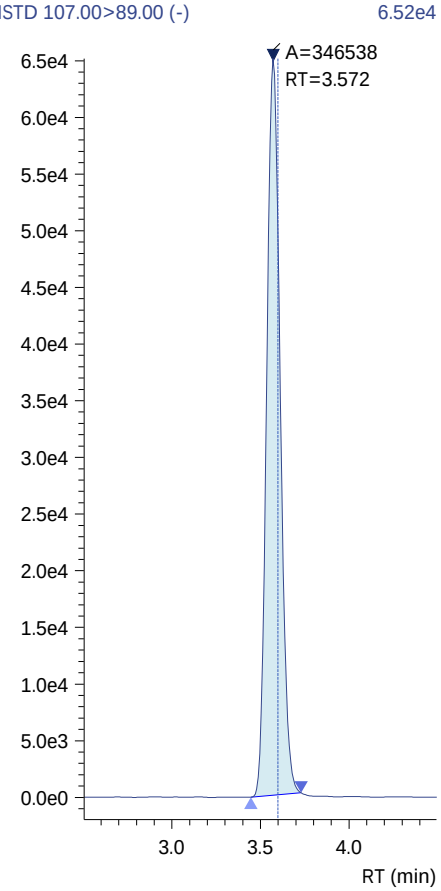
Perchlorate

Conc 0.0968
R#1 36.83 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

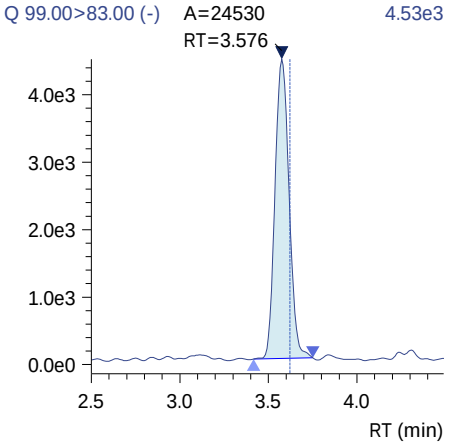
Perchlorate ICAL 2

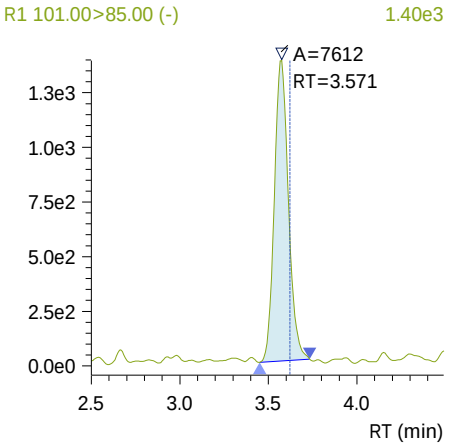
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	24530	345149	0.4820	ng/mL	101.00 >85.00	31.03	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.571	345149	345149	1.0000	ng/mL	----	----	

Perchlorate

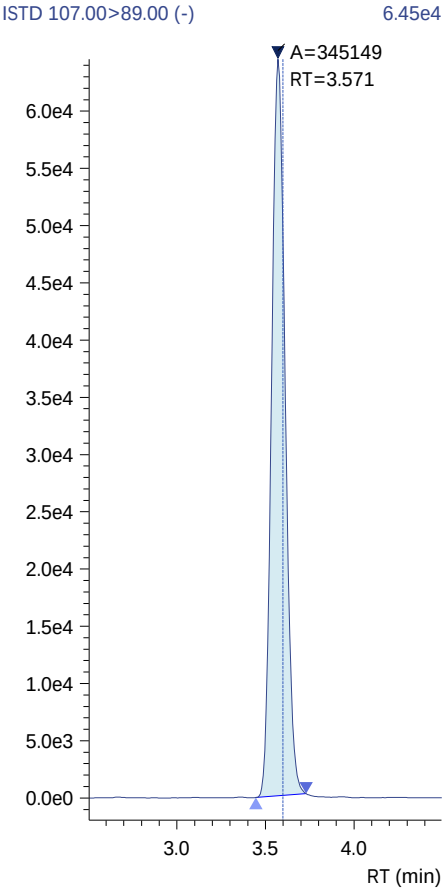
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 3

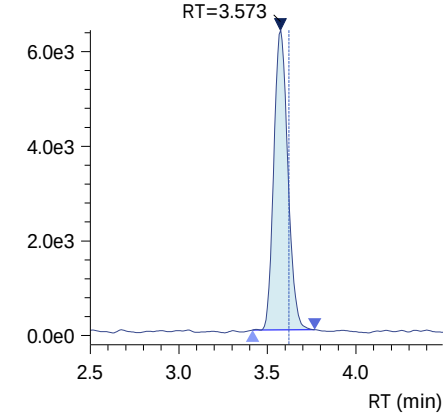
Sample ID: Perchlorate ICAL 3
Date Acquired: 8/2/2023 1:28:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-005.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	34872	341974	0.6915	ng/mL	101.00 >85.00	27.14	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	341974	341974	1.0000	ng/mL	----	----	

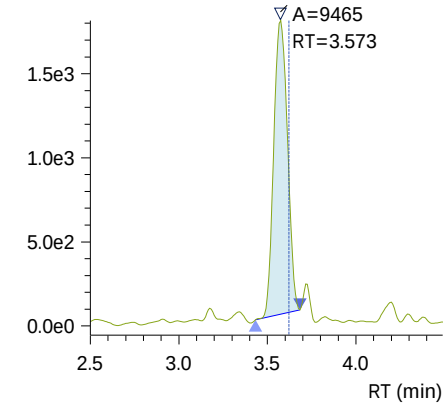
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)

Q 99.00>83.00 (-) A=34872 6.45e3



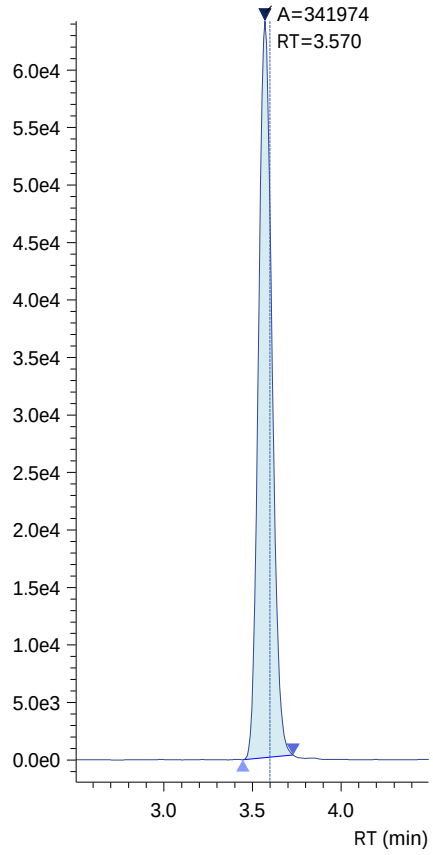
R1 101.00>85.00 (-) 1.82e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.42e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

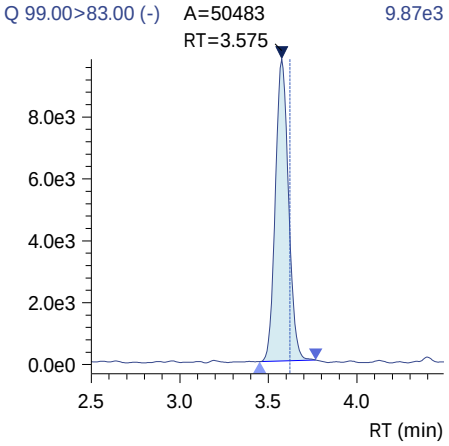
Perchlorate ICAL 4

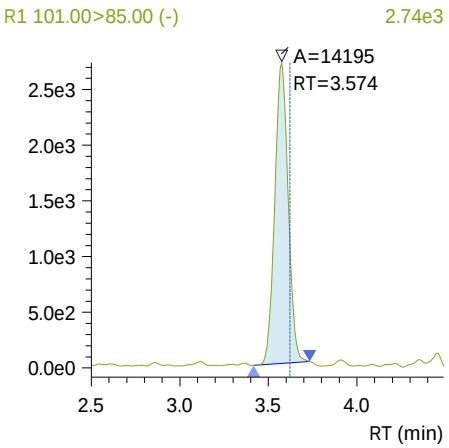
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	50483	338838	1.0104	ng/mL	101.00 >85.00	28.12	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	338838	338838	1.0000	ng/mL	----	----	

Perchlorate

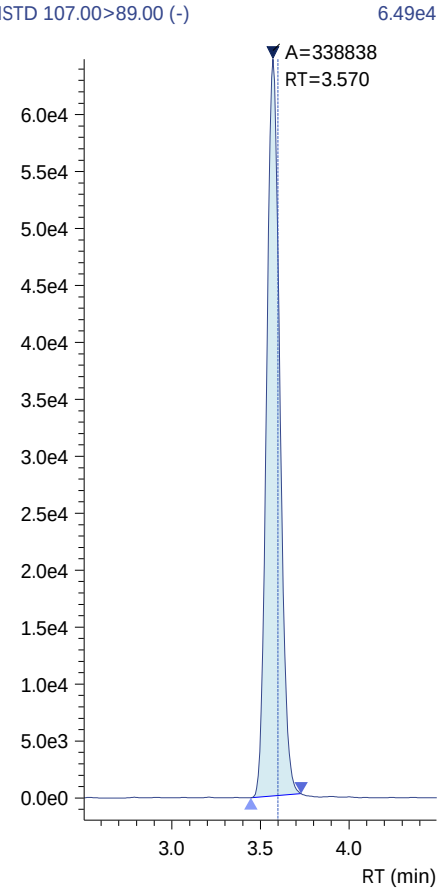
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 5

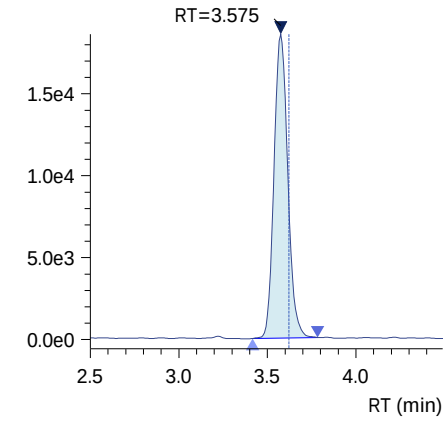
Sample ID: Perchlorate ICAL 5
Date Acquired: 8/2/2023 1:39:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-007.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	100319	331124	2.0545	ng/mL	101.00 >85.00	27.89	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	331124	331124	1.0000	ng/mL	----	----	

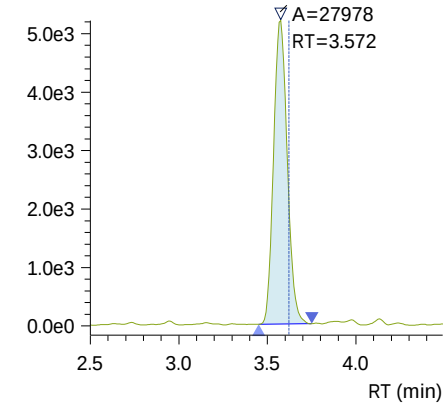
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)

Q 99.00>83.00 (-) A=100319 1.86e4



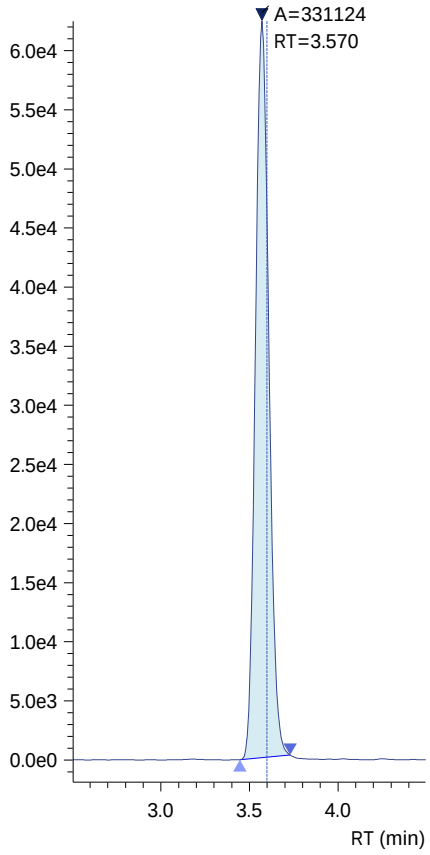
R1 101.00>85.00 (-) 5.22e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.25e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

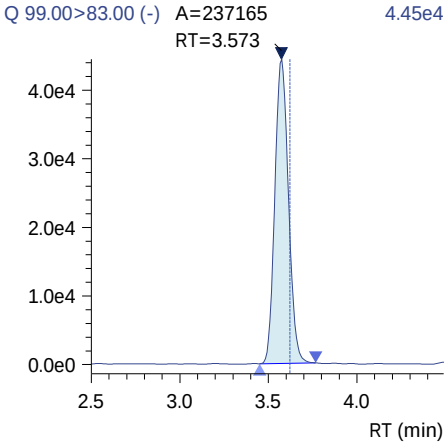
Perchlorate ICAL 6

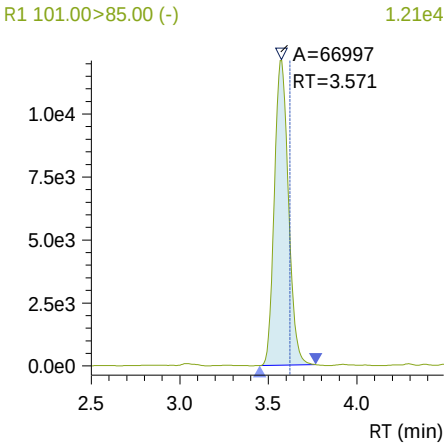
Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	237165	321666	5.0000	ng/mL	101.00 >85.00	28.25	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	321666	321666	1.0000	ng/mL	----	----	

Perchlorate

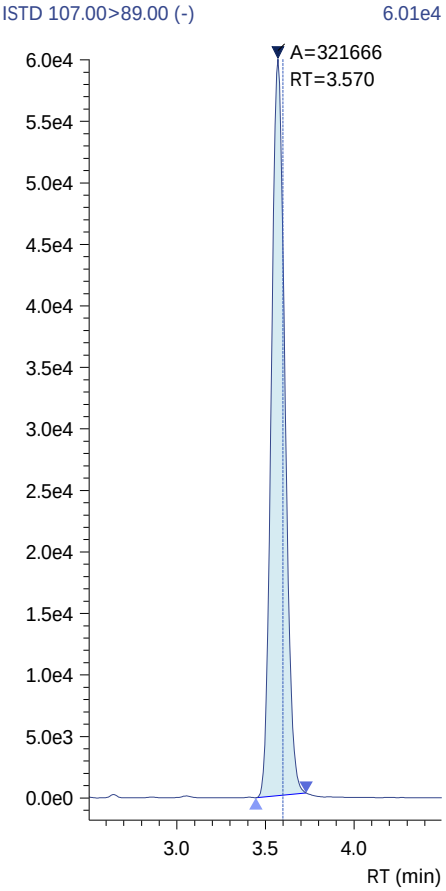
Conc 5.0000
R#1 28.25 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

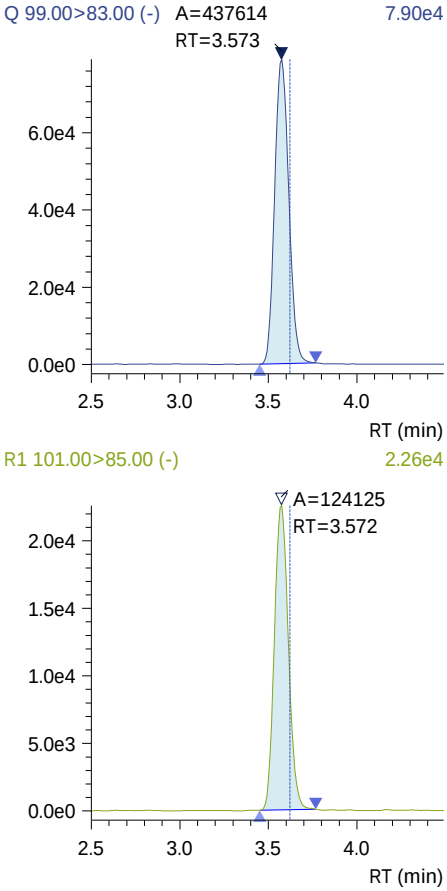
Perchlorate ICAL 7

Sample ID: Perchlorate ICAL 7
Date Acquired: 8/2/2023 1:50:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-009.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	437614	291215	10.1905	ng/mL	101.00 >85.00	28.36	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291215	291215	1.0000	ng/mL	----	----	

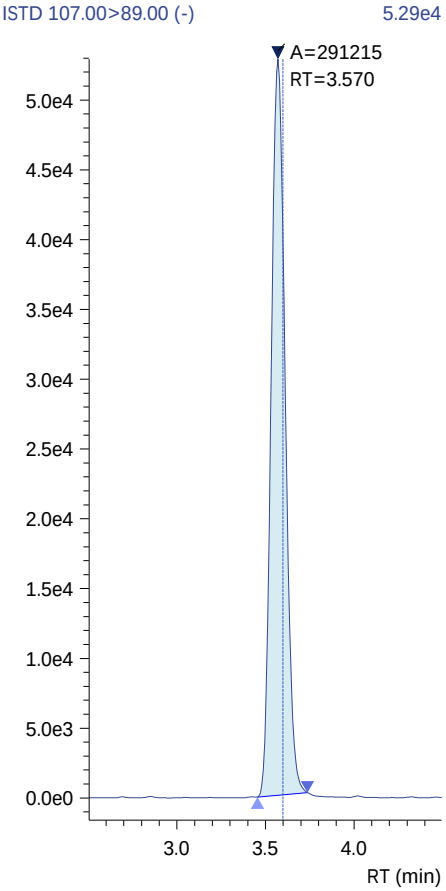
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 8

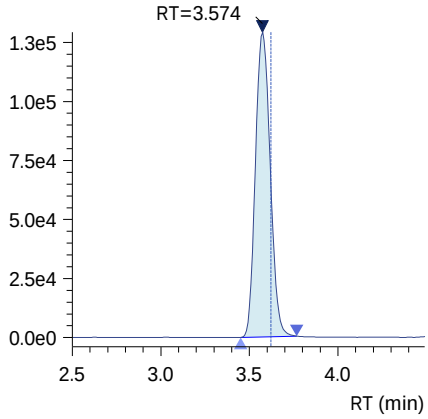
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	749856	253829	20.03 36	ng/mL	101.00 >85.00	28.56	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.569	253829	253829	1.0000	ng/mL	----	----	

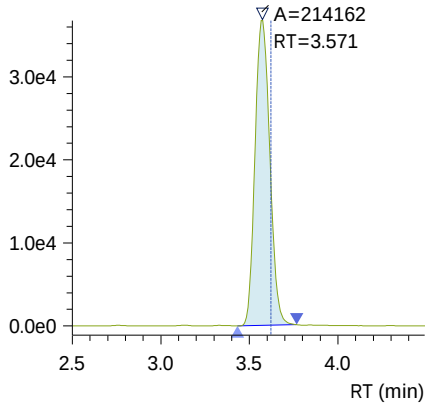
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



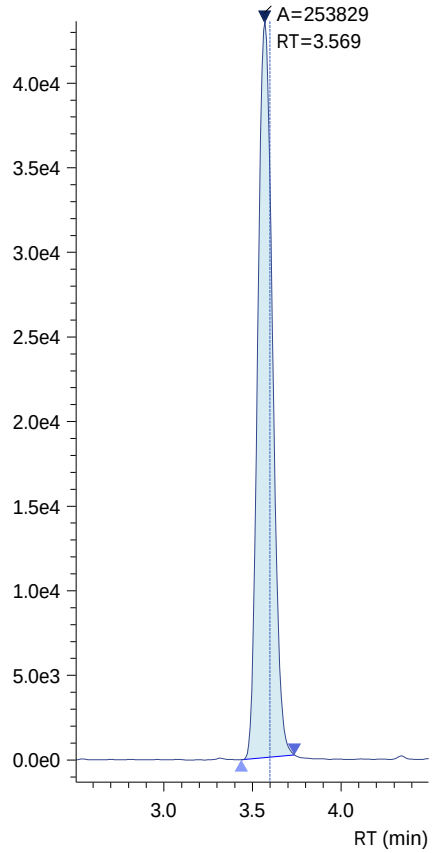
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 9

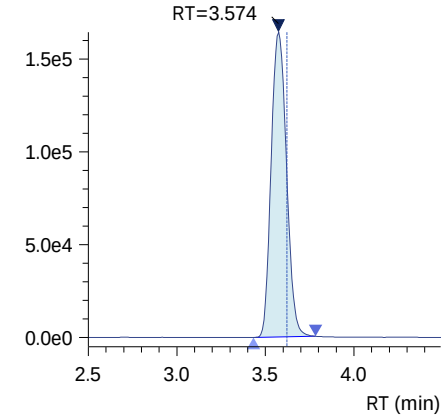
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	990671	222379	30.2105	ng/mL	101.00 >85.00	27.95	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.568	222379	222379	1.0000	ng/mL	----	----	

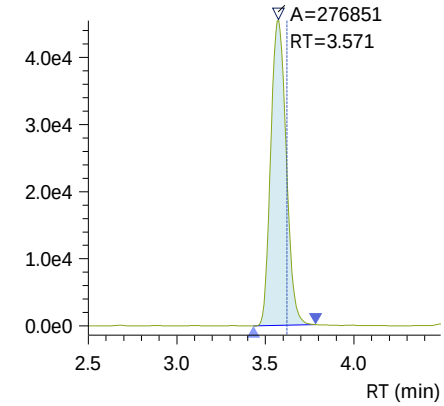
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 RT=3.574 1.64e5



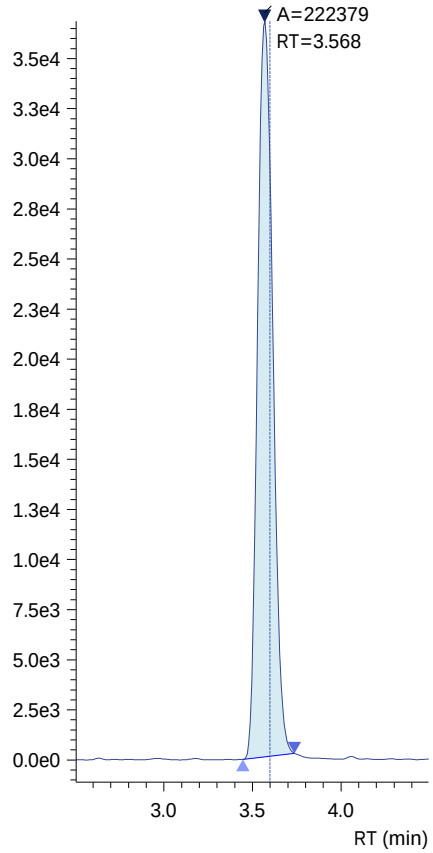
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 10

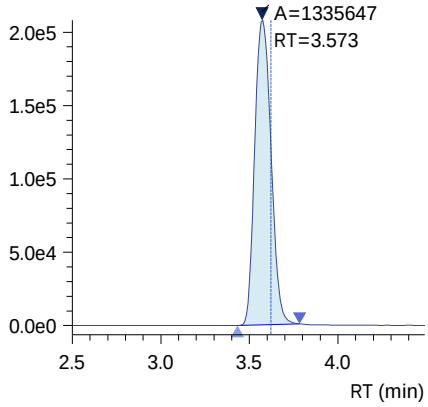
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1335647	178573	50.72 20	ng/mL	101.00 >85.00	28.04	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.567	178573	178573	1.0000	ng/mL	----	----	

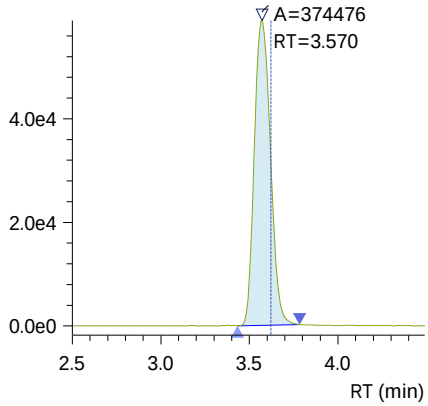
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



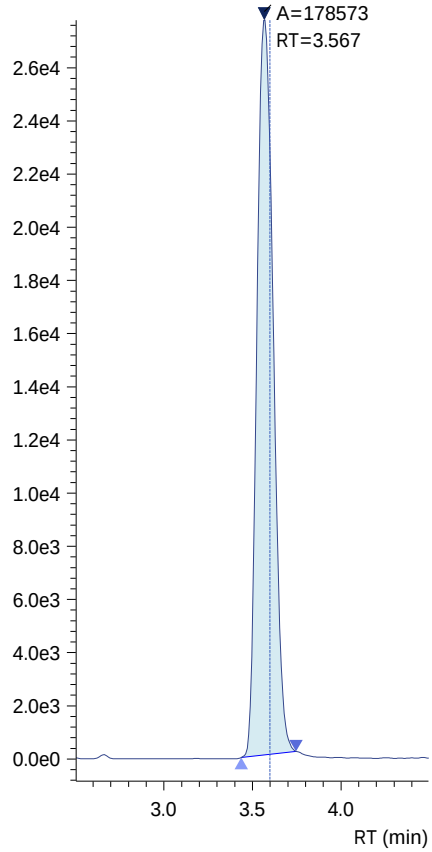
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

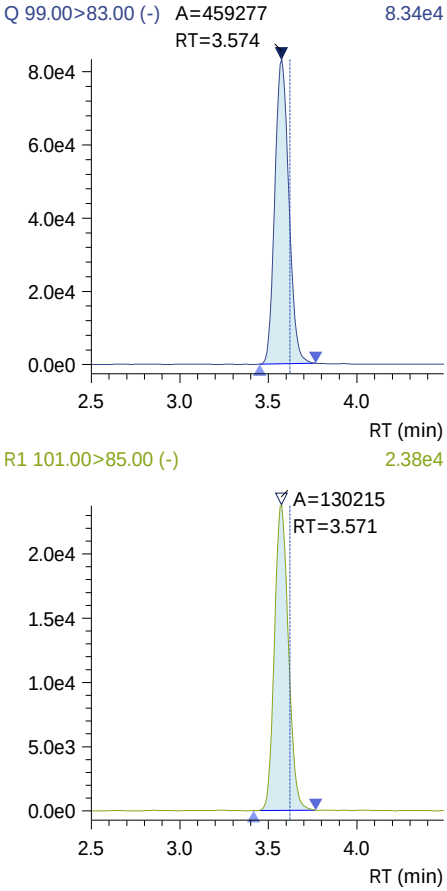
PerchlorateICV

Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	459277	291890	10.6703	ng/mL	101.00 >85.00	28.35	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291890	291890	1.0000	ng/mL	----	----	

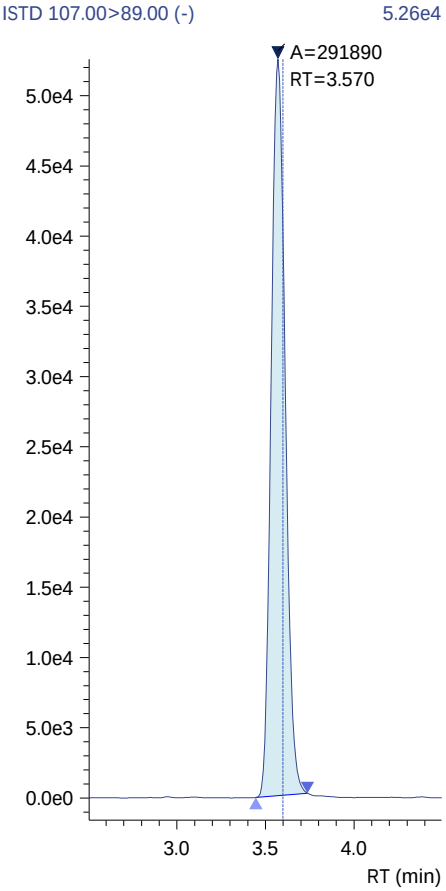
Perchlorate

Conc 10.6703
R#1 28.35 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230803-812728

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230803-001	Perchlorate6850c.lcm	1x		8/3/2023 9:04
2	LODV		2230803-002	Perchlorate6850c.lcm	1x	230386	8/3/2023 9:09
3	ICS		2230803-003	Perchlorate6850c.lcm	1x		8/3/2023 9:16
4	CCV		2230803-004	Perchlorate6850c.lcm	1x	230380	8/3/2023 9:22
5	EQ2300376-01		2230803-005	Perchlorate6850c.lcm	1x		8/3/2023 9:35
6	EQ2300376-02		2230803-006	Perchlorate6850c.lcm	1x		8/3/2023 9:40
7	EQ2300376-03		2230803-007	Perchlorate6850c.lcm	1x		8/3/2023 9:46
8	EQ2300376-04		2230803-008	Perchlorate6850c.lcm	1x		8/3/2023 9:51
9	EQ2300376-05		2230803-009	Perchlorate6850c.lcm	1x		8/3/2023 9:57
10	E2300694-001		2230803-010	Perchlorate6850c.lcm	1x		8/3/2023 10:02
11	E2300694-002		2230803-011	Perchlorate6850c.lcm	1x		8/3/2023 10:08
12	E2300694-003		2230803-012	Perchlorate6850c.lcm	1x		8/3/2023 10:14
13	E2300694-004		2230803-013	Perchlorate6850c.lcm	1x		8/3/2023 10:19
14	CCV		2230803-014	Perchlorate6850c.lcm	1x	230380	8/3/2023 10:25
15	E2300695-001		2230803-015	Perchlorate6850c.lcm	1x		8/3/2023 10:30
16	E2300695-002		2230803-016	Perchlorate6850c.lcm	1x		8/3/2023 10:36
17	E2300695-003		2230803-017	Perchlorate6850c.lcm	1x		8/3/2023 10:41
18	E2300695-004		2230803-018	Perchlorate6850c.lcm	1x		8/3/2023 10:47
19	E2300695-005		2230803-019	Perchlorate6850c.lcm	1x		8/3/2023 10:52
20	E2300695-006		2230803-020	Perchlorate6850c.lcm	1x		8/3/2023 10:58
21	E2300695-007		2230803-021	Perchlorate6850c.lcm	1x		8/3/2023 11:03
22	E2300696-001		2230803-022	Perchlorate6850c.lcm	1x		8/3/2023 11:09
23	E2300696-002		2230803-023	Perchlorate6850c.lcm	1x		8/3/2023 11:14
24	E2300696-003		2230803-024	Perchlorate6850c.lcm	1x		8/3/2023 11:20
25	CCV		2230803-025	Perchlorate6850c.lcm	1x	230380	8/3/2023 11:26
26	E2300707-001		2230803-026	Perchlorate6850c.lcm	1x		8/3/2023 11:31
27	E2300707-002		2230803-027	Perchlorate6850c.lcm	10x		8/3/2023 11:37
28	K2308541-001		2230803-028	Perchlorate6850c.lcm	1x		8/3/2023 11:42
29	K2308541-002		2230803-029	Perchlorate6850c.lcm	1x		8/3/2023 11:48
30	K2308541-003		2230803-030	Perchlorate6850c.lcm	1x		8/3/2023 11:53
31	K2308541-004		2230803-031	Perchlorate6850c.lcm	1x		8/3/2023 11:59
32	CCV		2230803-032	Perchlorate6850c.lcm	1x	230380	8/3/2023 12:04

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Analyzed:**	8/3/23 09:22

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230803\2230803-004	**Lab Code:**	EQ2300377-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	812728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-01	299,309	3.59
Method Blank	EQ2300376-01	347,687	3.59
Lab Control Sample	EQ2300376-02	339,111	3.58
Duplicate Lab Control Sample	EQ2300376-03	340,973	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Analyzed:**	8/3/23 10:25

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230803\2230803-014	**Lab Code:**	EQ2300377-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	812728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-02	294,179	3.57

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/3/23 11:26

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230803\2230803-025
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300377-03
Analysis Lot: 812728
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-03	293,305	3.57
LH18/24-SP650_080123_AIX	E2300707-001	308,820	3.57
LH18/24-SP650_080123_BIX	E2300707-002	227,047	3.57

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300707
Project:	HS23080100	**Date Analyzed:**	8/3/23 12:04

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230803\2230803-032	**Lab Code:**	EQ2300377-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	812728
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300377-04	294,279	3.57

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-004

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.92	0.1475	0.1463	-0.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-014

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1510	2.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-025

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1494	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080100

Service Request: E2300707
Date Analyzed: 8/ 3/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230803\2230803-032

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 812728
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1496	1.4	NA	± 15 %	Average RF

Insight Report

Printed at 8/3/2023 12:22:11 PM

Method File: I:\LCMS01\DATA\20230803\20230803.lcm
Project File: I:\LCMS01\DATA\20230803\20230803.damlp

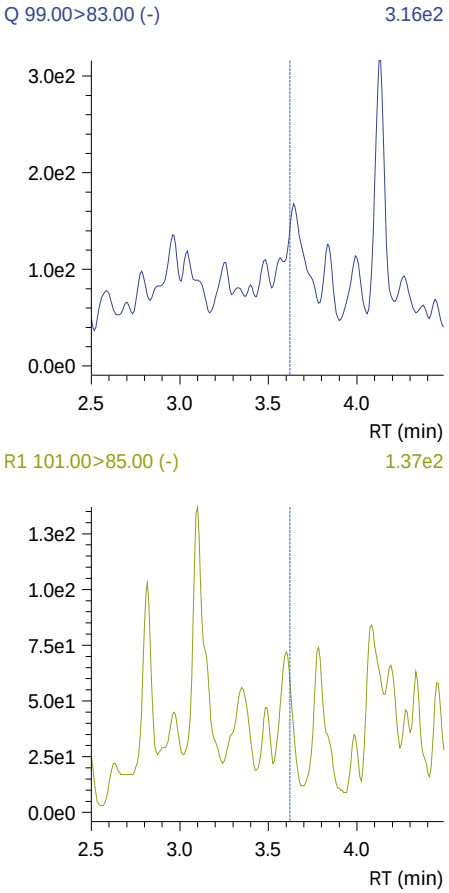
IB

Sample ID: IB
Date Acquired: 8/3/2023 9:04:18 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	392197	----	ng/mL	101.00 >85.00	0.00	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.615	392197	392197	1.0000	ng/mL	----	----	

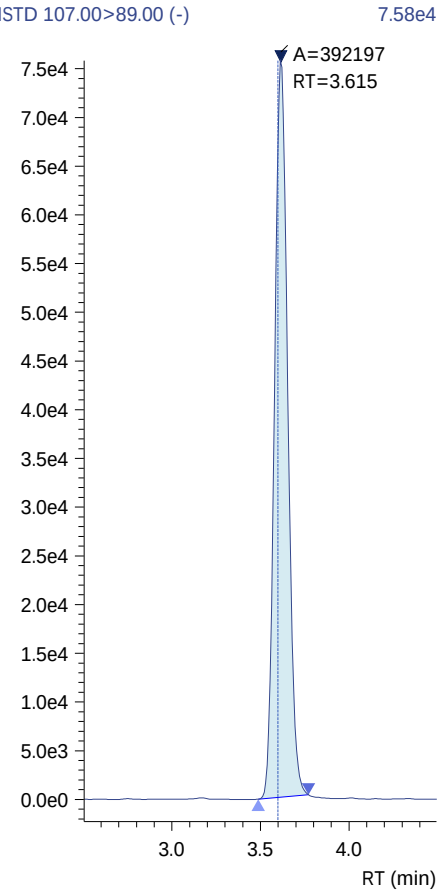
Perchlorate

Conc ----
R#1 0.00 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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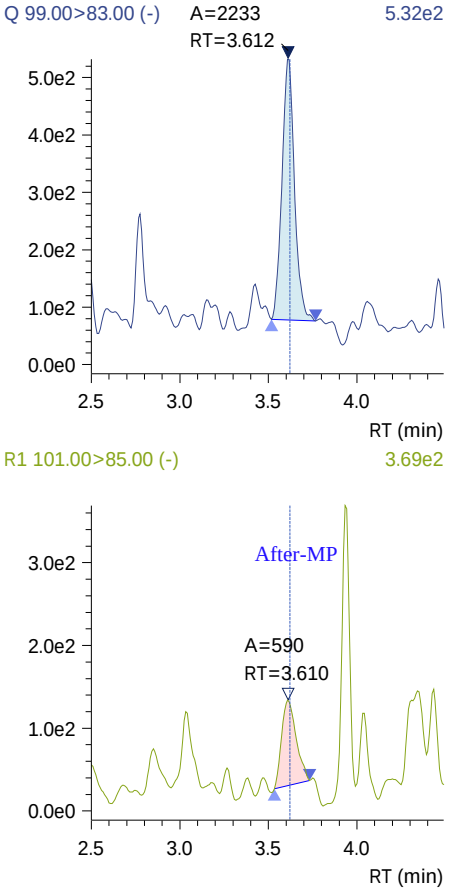
LODV

Sample ID: LODV
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Acquired by: System Administrator
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Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.612	2233	356427	0.0425	ng/mL	101.00 >85.00	26.40	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.604	3564 27	356427	1.0000	ng/mL	----	----	

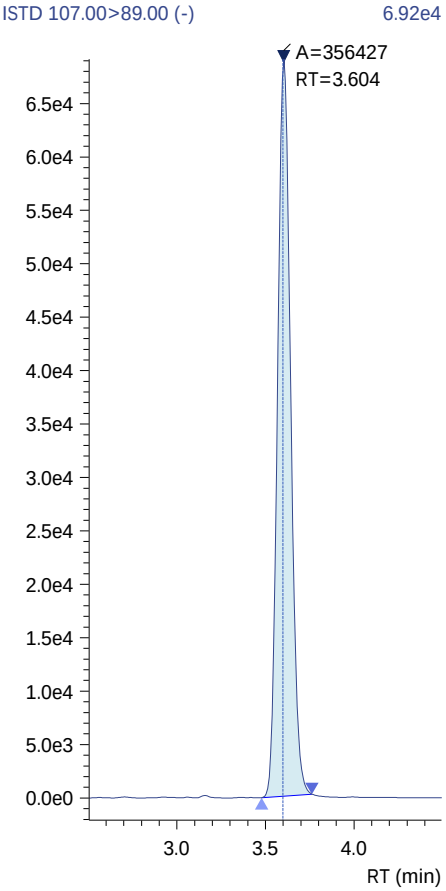
Perchlorate

Conc 0.0425
R#1 26.40 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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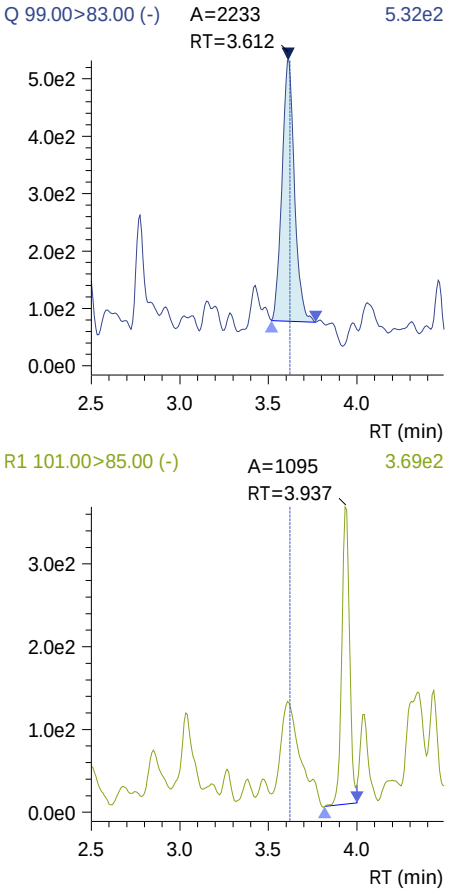
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LODV

Sample ID: LODV
Date Acquired: 8/3/2023 9:09:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

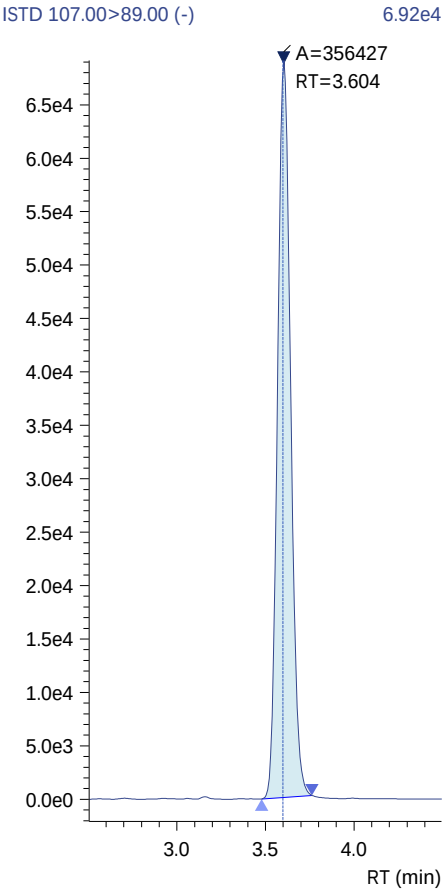
Perchlorate

Conc 0.0425
R#1 0.00 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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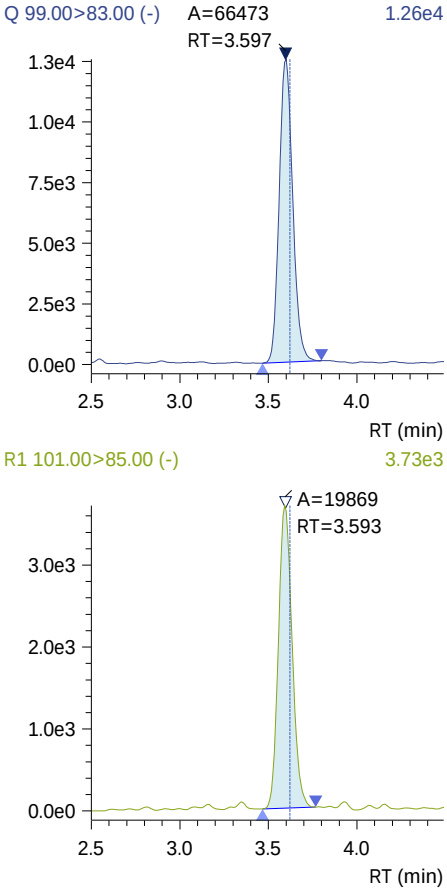
ICS

Sample ID: ICS
Date Acquired: 8/3/2023 9:16:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.597	66473	410346	1.0985	ng/mL	101.00 >85.00	29.89	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.594	4103 46	410346	1.0000	ng/mL	----	----	

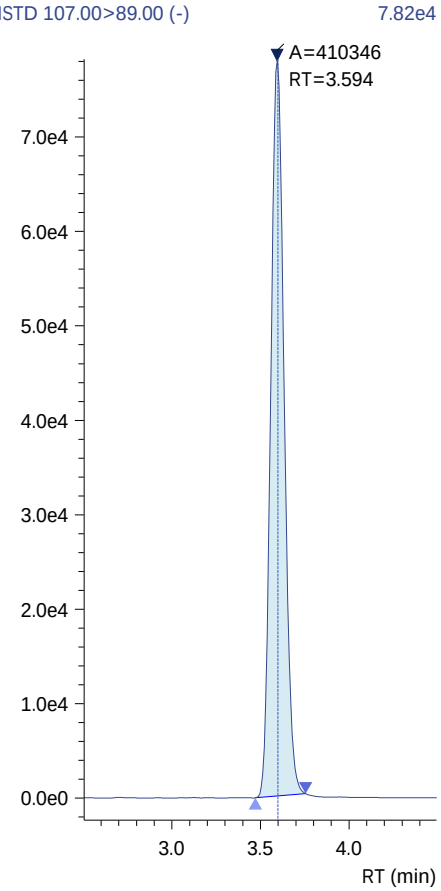
Perchlorate

Conc 1.0985
R#1 29.89 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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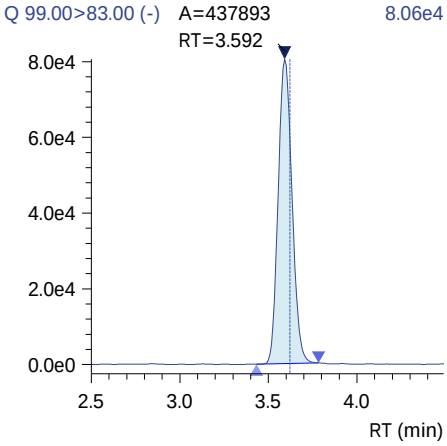
CCV

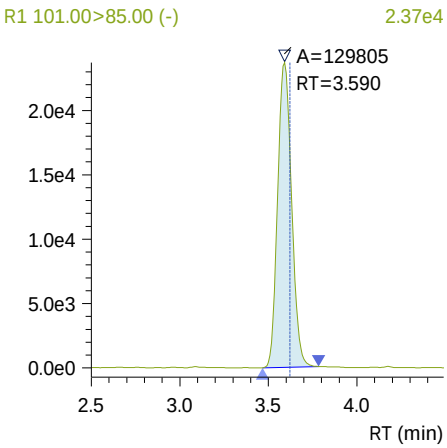
Sample ID: CCV
Date Acquired: 8/3/2023 9:22:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-004.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.592	437893	299309	9.9213	ng/mL	101.00 >85.00	29.64	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.589	299309	299309	1.0000	ng/mL	----	----	

Perchlorate

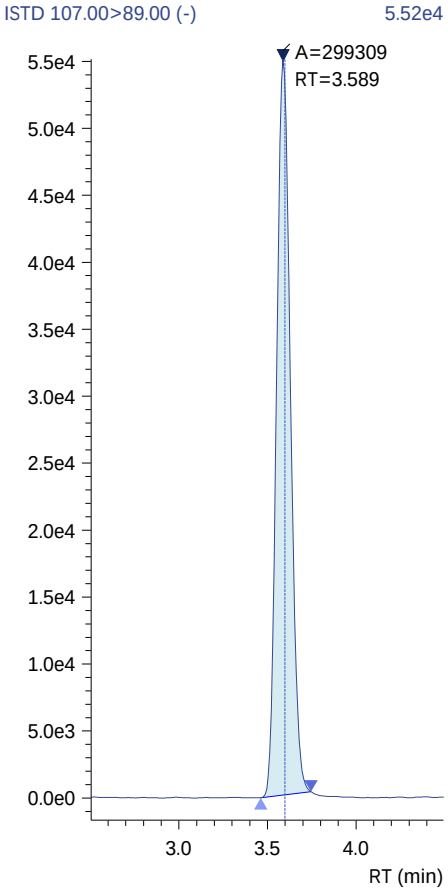
Conc 9.9213
R#1 29.64 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

EQ2300376-01

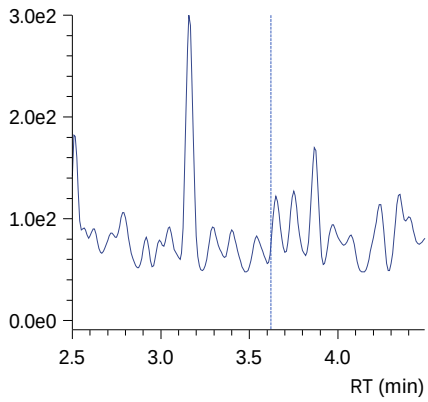
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Date Acquired: 8/3/2023 9:35:18 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-005.lcd
Vial: 21 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	347687	----	ng/mL	101.00 >85.00	0.00	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.585	347687	347687	1.0000	ng/mL	----	----	

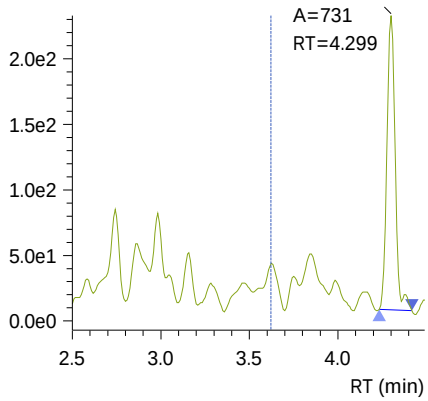
Perchlorate

Conc ----
R#1 0.00 (28.27)

Q 99.00>83.00 (-) 3.00e2



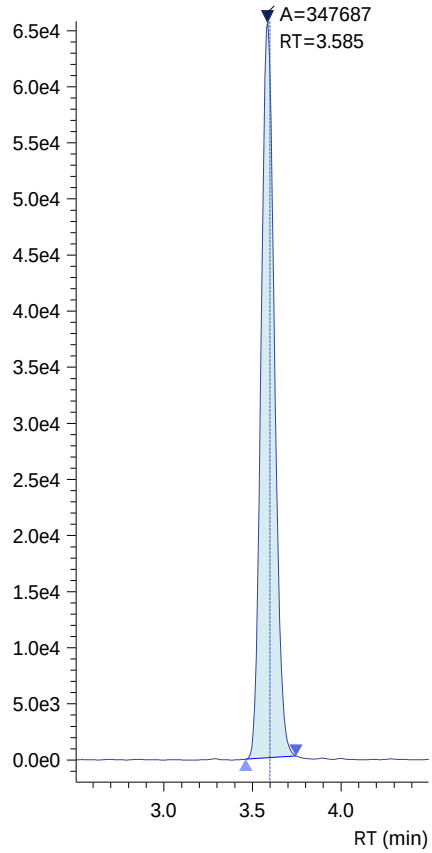
R1 101.00>85.00 (-) 2.33e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.58e4



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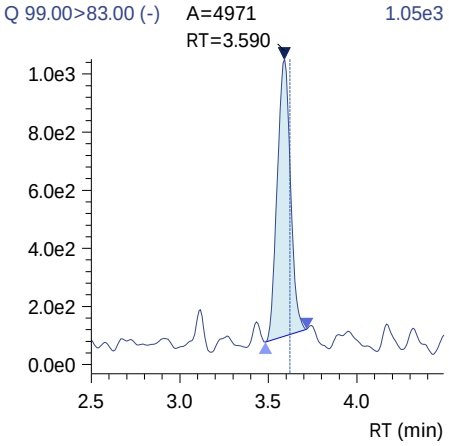
EQ2300376-02

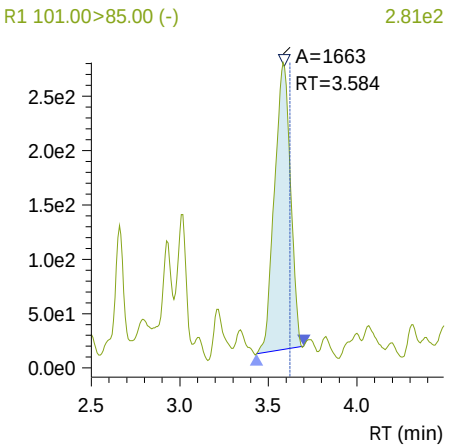
Sample ID: EQ2300376-02
Date Acquired: 8/3/2023 9:40:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-006.lcd
Vial: 22 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	4971	339111	0.0994	ng/mL	101.00 >85.00	33.46	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.582	3391 11	339111	1.0000	ng/mL	----	----	

Perchlorate

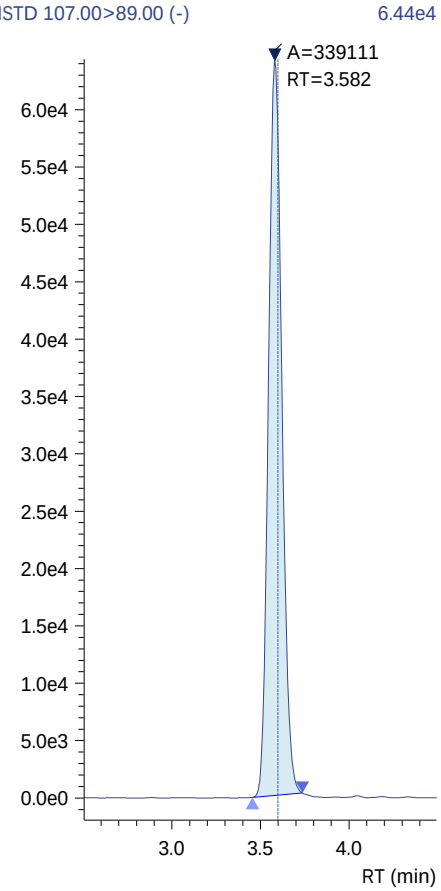
Conc 0.0994
R#1 33.46 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

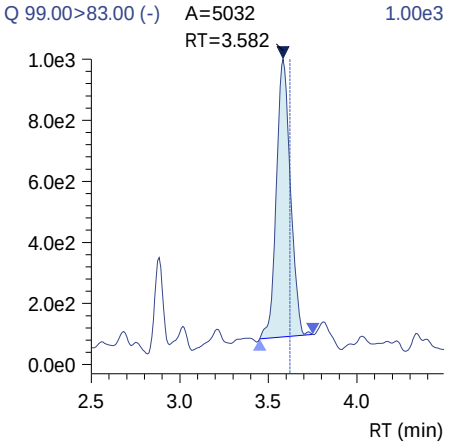
EQ2300376-03

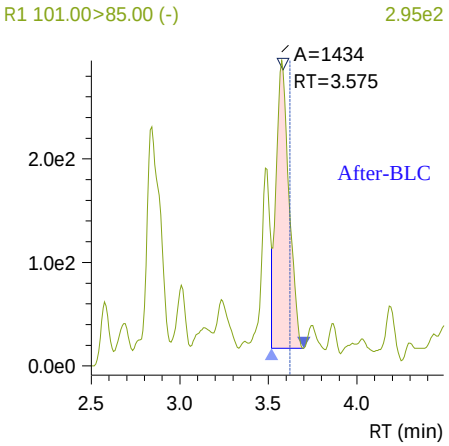
Sample ID: EQ2300376-03
Date Acquired: 8/3/2023 9:46:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-007.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.582	5032	340973	0.1001	ng/mL	101.00 >85.00	28.49	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.580	3409 73	340973	1.0000	ng/mL	----	----	

Perchlorate

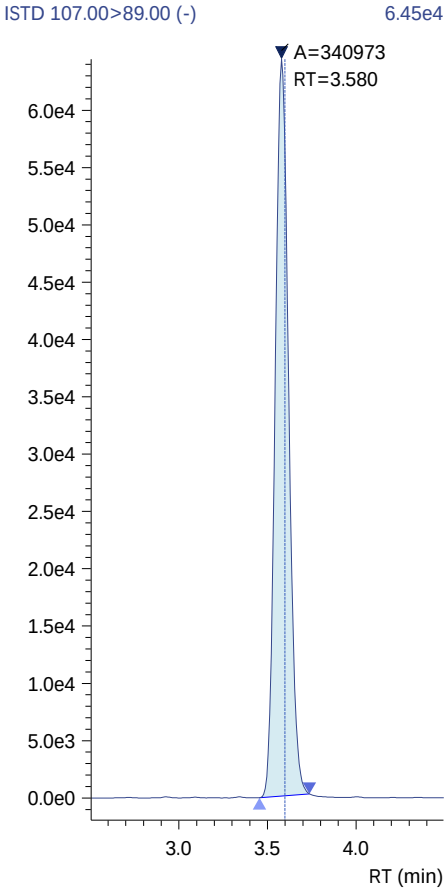
Conc 0.1001
R#1 28.49 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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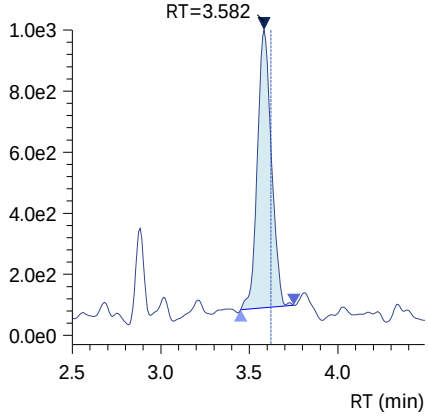
EQ2300376-03

Sample ID: EQ2300376-03
Date Acquired: 8/3/2023 9:46:19 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-007.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 3

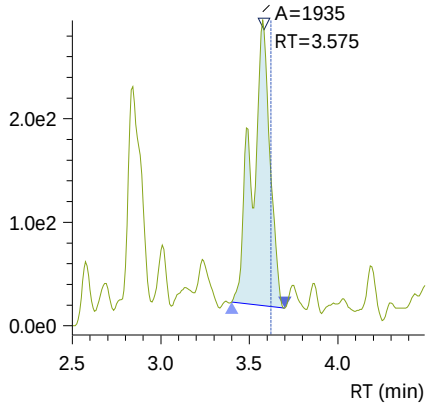
Perchlorate

Conc 0.1001
R#1 38.46 (28.27)

Q 99.00>83.00 (-) A=5032 1.00e3



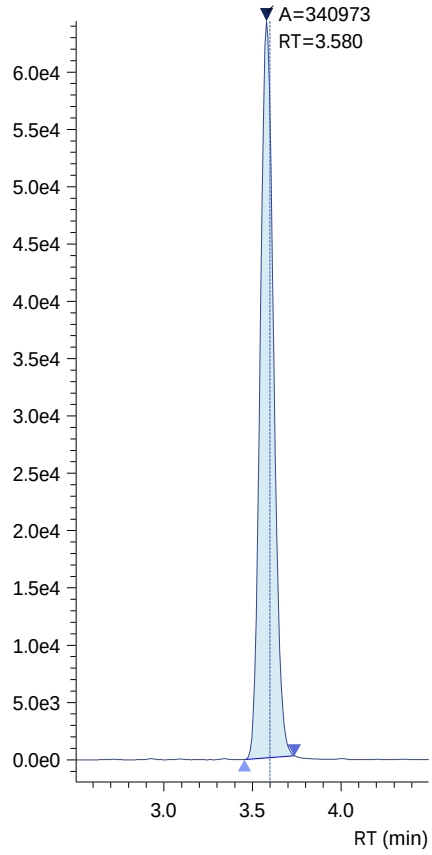
R1 101.00>85.00 (-) 2.95e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.45e4



Insight Report

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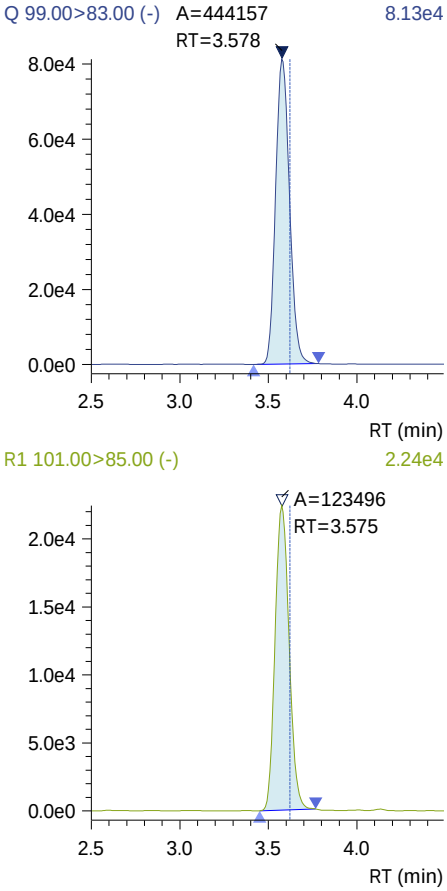
CCV

Sample ID: CCV
Date Acquired: 8/3/2023 10:25:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-014.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	444157	294179	10.2387	ng/mL	101.00 >85.00	27.81	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.574	294179	294179	1.0000	ng/mL	----	----	

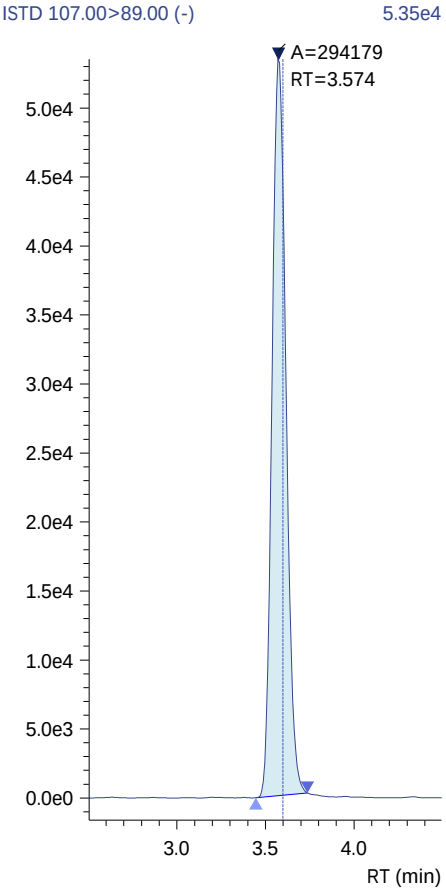
Perchlorate

Conc 10.2387
R#1 27.81 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

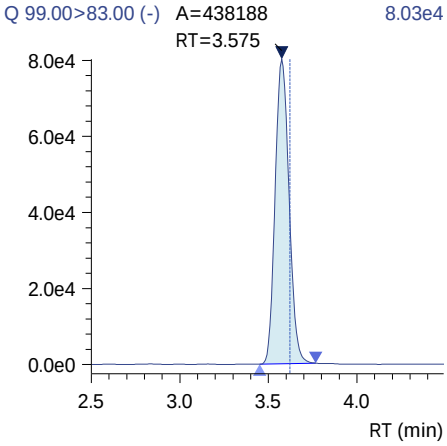
CCV

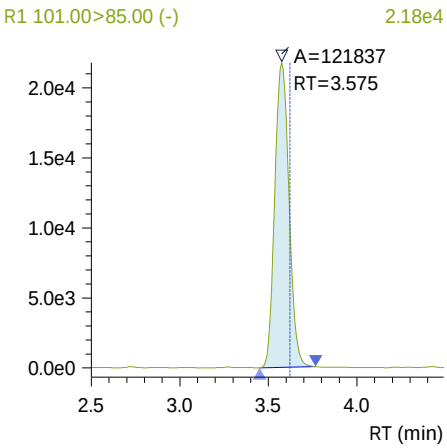
Sample ID: CCV
Date Acquired: 8/3/2023 11:26:04 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-025.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	438188	293305	10.13 12	ng/mL	101.00 >85.00	27.81	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.572	293305	293305	1.0000	ng/mL	----	----	

Perchlorate

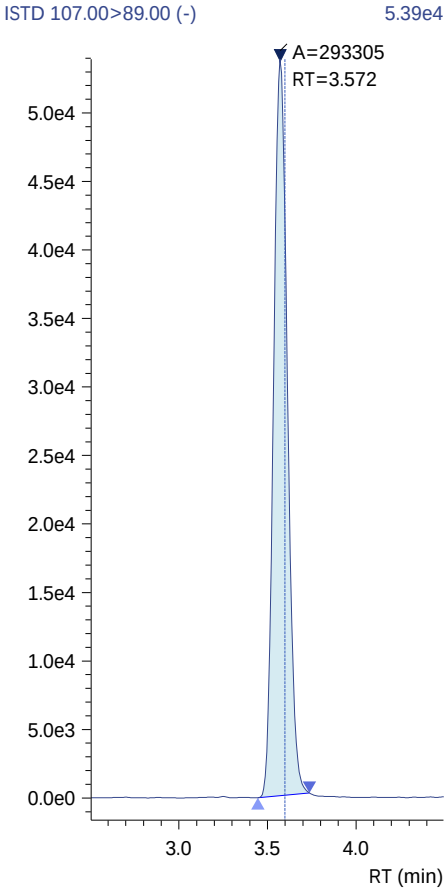
Conc 10.1312
R#1 27.81 (28.27)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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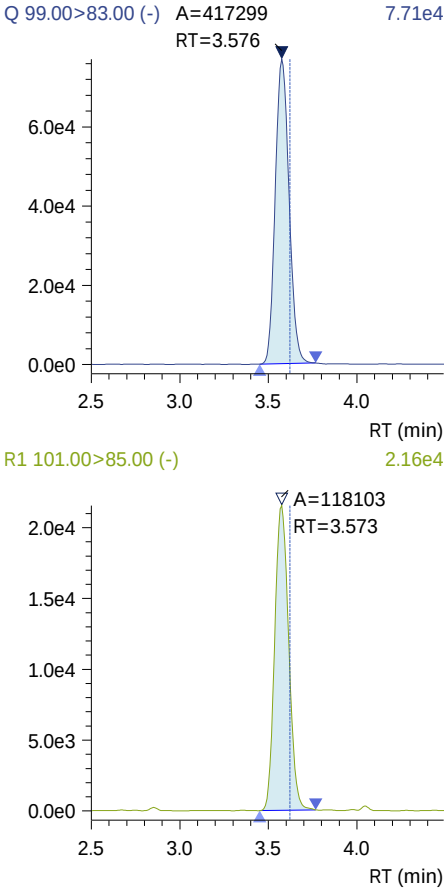
E2300707-001

Sample ID: E2300707-001
Date Acquired: 8/3/2023 11:31:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-026.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	417299	308820	9.1635	ng/mL	101.00 >85.00	28.30	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.571	308820	308820	1.0000	ng/mL	----	----	

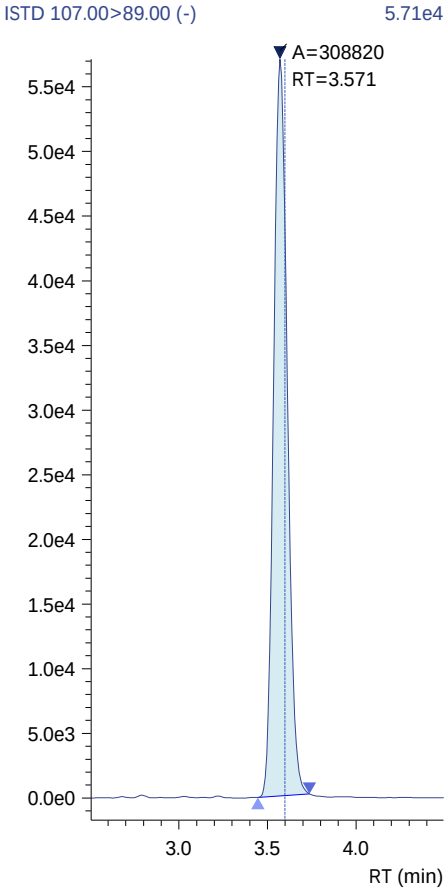
Perchlorate

Conc 9.1635
R#1 28.30 (28.27)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 12:22:11 PM

E2300707-002x10

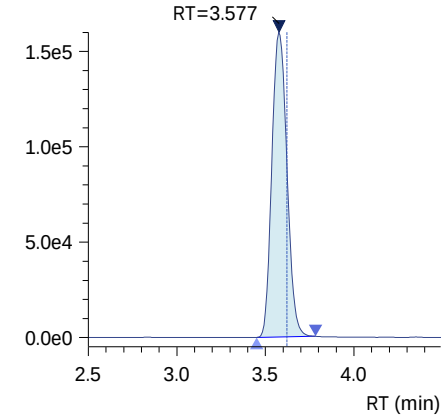
Sample ID: E2300707-002
Date Acquired: 8/3/2023 11:37:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-027.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	948321	227047	28.3244	ng/mL	101.00 >85.00	28.09	19.79-36.75
Sodium Perchlorate-18O4_IS	Auto	3.572	227047	227047	1.0000	ng/mL	----	----	

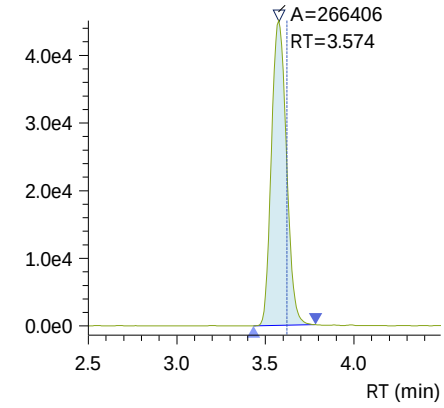
Perchlorate

Conc 28.3244
R#1 28.09 (28.27)

Q 99.00>83.00 (-) A=948321 1.60e5



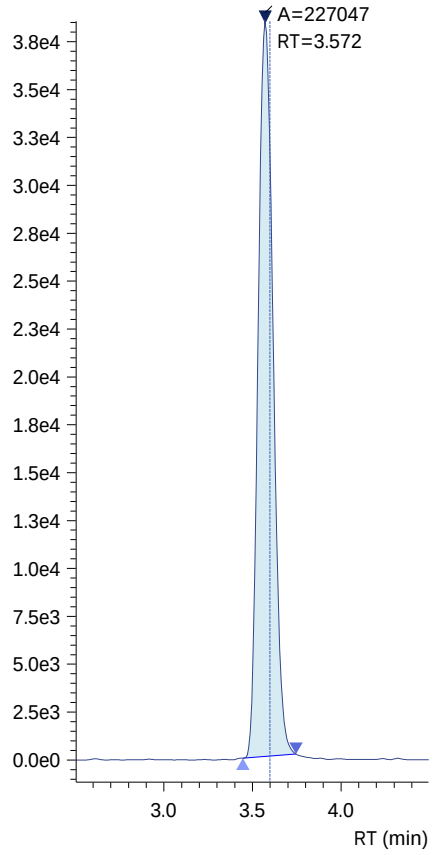
R1 101.00>85.00 (-) 4.51e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.86e4



Insight Report

Printed at 8/3/2023 12:22:11 PM

CCV

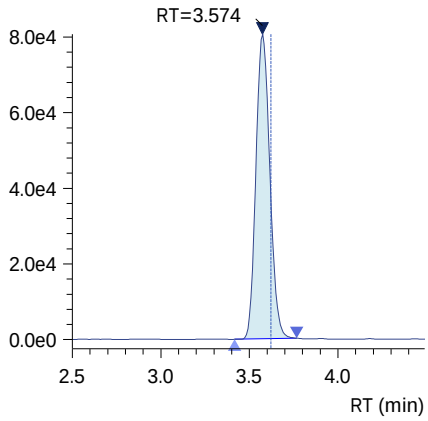
Sample ID: CCV
Date Acquired: 8/3/2023 12:04:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230803\2230803-032.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	4402 11	294279	10.14 43	ng/mL	101.00 >85.00	27.81	19.79-36.75
Sodium Perchlorate-18O4 _IS	Auto	3.571	2942 79	294279	1.0000	ng/mL	----	----	

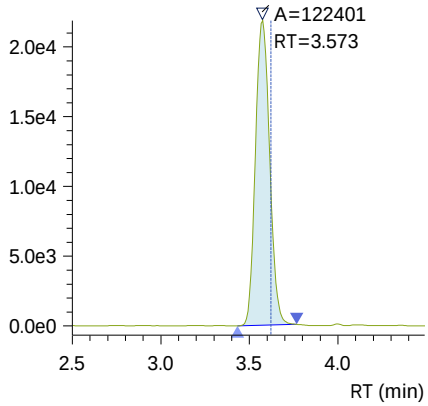
Perchlorate

Conc 10.1443
R#1 27.81 (28.27)

Q 99.00>83.00 (-) A=440211 8.08e4



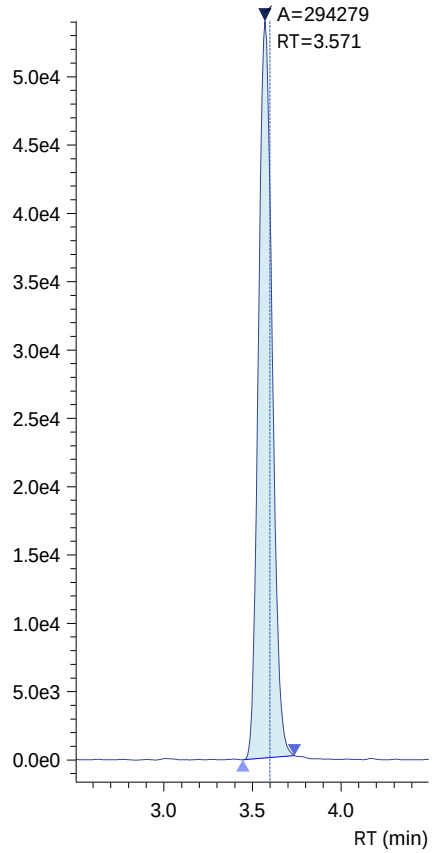
R1 101.00>85.00 (-) 2.19e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.41e4



HS23080101 Longhorn GW Treatment Plant
Monthly Effluent Samples Cover Page

ALS WO# HS23080101

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Table of Contents

HS23080101 Longhorn GW Treatment Plant Monthly Effluent Samples Cover Page
- CoverPage
- HS23080101 Longhorn GW Treatment Plant Monthly Effluent Samples Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - LH18/24-SP650_080123
  - LH18/24-SP650_080123_AIX
  - Trip Blank
  - Weight/Volume Log
  - Dates Report
  - QC
  - Acronyms
  - Certifications
  - SampleReceiptCheckList
  - COC
  - HS23080101-E2300708 Perchlorate Final Report II
- HS23080101-MSVOA-SW8260
  - Form 1 - Sample Results
  - Form 2 - Surrogates
  - Form 3A - MS/MSD
  - Form 3B - LCS/LCSD

Table of Contents (continued)

Form 4 - MB Assoc
Form 5 - Tune
Form 6 - ICAL
Form 6I - ICV
Form 7 - CCV
Form 8 - ISTD
Run Log
Raw Data VOA9 442900
Raw Data VOA9 443493

HS23080101-MSSEMI-SW8270SIM
Form 1 - Sample Results
Form 2 - Surrogates
Form 3B - LCS/LCSD
Form 4 - MB Assoc
Form 5 - Tune
Form 6 - ICAL
Form 6I - ICV
Form 7 - CCV
Prep Log
Run Log
Raw Data SV 6 439923
Raw Data SV 6 443683

HS23080101 - ME - ICP_W_DOD
Form 11 - ICPMS05 Internal Standard Association
Form 13 - ICPMS05_443258 Run Log
Form 13 - ICPMS06_443328 Run Log
Form 2 - ICPMS05_443258 CCV
Form 2 - ICPMS06_443328 CCV
Form 3 - ICPMS05_443258 CCB
Form 3 - ICPMS06_443328 CCB
Form 4 - ICPMS05_443258 ICSA
Form 4 - ICPMS06_443328 ICSA
Form 5A - ICPMS05_443258 MS
Form 5B - ICPMS05_443258 PDS
Form 7 - ICPMS05_443258 LCS

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WorkOrder: HS23080101

Longhorn GW Treatment Plant Monthly Effluent Samples

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

14-Aug-2023

HS23080101 Longhorn GW Treatment Plant
Monthly Effluent Samples Final

ALS WO# HS23080101

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August 12, 2023

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS23080101**

Laboratory Results for: **Longhorn GW Treatment Plant Monthly Effluent Samples**

Dear Marcia Olive,

ALS Environmental received 3 sample(s) on Aug 02, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
Work Order: HS23080101

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23080101-01	LH18/24-SP650_080123	Water		01-Aug-2023 13:00	02-Aug-2023 09:30	☐
HS23080101-02	LH18/24-SP650_080123_AIX	Water		01-Aug-2023 13:00	02-Aug-2023 09:30	☐
HS23080101-03	Trip Blank	Water	CG-061323-21	01-Aug-2023 00:00	02-Aug-2023 09:30	☐

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
Work Order: HS23080101

Work Order Comments

• The analysis for Perchlorate was subcontracted to ALS Houston High-Res Lab. Final report attached

GCMS Semivolatiles by Method SW8270SIM

Batch ID: 198572

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

GCMS Volatiles by Method SW8260

Batch ID: R443493

Sample ID: VLCSW-230808

• 4_Isopropyltoluene and Hexachlorobutadiene exceeded QC limits for LCS. Samples are ND for these compounds.

Sample ID: LH18/24-SP650_080123 (HS23080101-01MS)

• MS and MSD failed QC limit for some few compounds

Metals by Method SW6020A

Batch ID: 198597

Sample ID: HS23071878-02MSD

• MSD is for an unrelated sample

WetChemistry by Method SW7196

Batch ID: R443256

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **ANALYTICAL REPORT**
Project: Longhorn GW Treatment Plant Monthly Effluent Samples WorkOrder:HS23080101
Sample ID: LH18/24-SP650_080123 Lab ID:HS23080101-01
Collection Date: 01-Aug-2023 13:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,1,2-Trichloroethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,1-Dichloropropene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2,3-Trichlorobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2,3-Trichloropropane	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2,4-Trichlorobenzene	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2,4-Trimethylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2-Dichlorobenzene	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,2-Dichloropropane	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,3,5-Trimethylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,3-Dichlorobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,3-Dichloropropane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
1,4-Dichlorobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
2-Butanone	0.50	U	0.50	0.50	2.0	ug/L	1	08-Aug-2023 14:46
2-Chlorotoluene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	08-Aug-2023 14:46
4-Chlorotoluene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
4-Isopropyltoluene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	08-Aug-2023 14:46
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	08-Aug-2023 14:46
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Bromobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Bromoform	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Bromomethane	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	08-Aug-2023 14:46
Carbon tetrachloride	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Chlorobenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Chloroethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
ANALYTICAL REPORT
Project: Longhorn GW Treatment Plant Monthly Effluent Samples WorkOrder:HS23080101
Sample ID: LH18/24-SP650_080123 Lab ID:HS23080101-01
Collection Date: 01-Aug-2023 13:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
cis-1,2-Dichloroethene	**3.5**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Aug-2023 14:46
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Dibromochloromethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Dichlorodifluoromethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Ethylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Hexachlorobutadiene	0.50	U	1.0	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Isopropylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	08-Aug-2023 14:46
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Aug-2023 14:46
n-Butylbenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 14:46
n-Propylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Naphthalene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
o-Xylene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
sec-Butylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Styrene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
tert-Butylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Tetrachloroethene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Trichlorofluoromethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 14:46
Surr: 1,2-Dichloroethane-d4	*118*			**0**	*81-118*	*%REC*	*1*	*08-Aug-2023 14:46*
Surr: 4-Bromofluorobenzene	*95.8*			**0**	*85-114*	*%REC*	*1*	*08-Aug-2023 14:46*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*1*	*08-Aug-2023 14:46*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*08-Aug-2023 14:46*
SEMIVOLATILES SIM		**Method:SW8270SIM**				Prep:SW3510 / 04-Aug-2023		Analyst: JLJ
1,4-Dioxane	**0.90**	a	**0.10**	**0.10**	**0.10**	**ug/L**	10	10-Aug-2023 12:48
Surr: 2-Fluorobiphenyl	*128*			**0**	*40-140*	*%REC*	*10*	*10-Aug-2023 12:48*
Surr: 4-Terphenyl-d14	*96.2*			**0**	*40-140*	*%REC*	*10*	*10-Aug-2023 12:48*
Surr: Nitrobenzene-d5	*99.9*			**0**	*40-140*	*%REC*	*10*	*10-Aug-2023 12:48*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 04-Aug-2023		Analyst: MSC
Barium	**0.152**		**0.00190**	**0.00250**	**0.00500**	**mg/L**	1	05-Aug-2023 00:13
Lead	0.00125	U	0.000600	0.00125	0.00500	mg/L	1	05-Aug-2023 00:13
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	05-Aug-2023 00:13
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	05-Aug-2023 00:13

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 12-Aug-23

ANALYTICAL REPORT

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
Sample ID: LH18/24-SP650_080123
Collection Date: 01-Aug-2023 13:00

WorkOrder:HS23080101
Lab ID:HS23080101-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
HEXAVALENT CHROMIUM BY SW7196A		**Method:SW7196**						Analyst: MZD
Chromium, Hexavalent	0.00600	U	0.00600	0.00600	0.0100	mg/L	1	02-Aug-2023 10:35

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **ANALYTICAL REPORT**

Project: Longhorn GW Treatment Plant Monthly Effluent Samples WorkOrder:HS23080101

Sample ID: LH18/24-SP650_080123_AIX Lab ID:HS23080101-02

Collection Date: 01-Aug-2023 13:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: KR
Subcontract Analysis	See Attached		0	0		NA	1	10-Aug-2023 12:17

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **ANALYTICAL REPORT**
Project: Longhorn GW Treatment Plant Monthly Effluent Samples WorkOrder:HS23080101
Sample ID: Trip Blank Lab ID:HS23080101-03
Collection Date: 01-Aug-2023 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,1,1-Trichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,1,2,2-Tetrachloroethane	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,1,2-Trichloroethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,1-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,1-Dichloropropene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2,3-Trichlorobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2,3-Trichloropropane	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2,4-Trichlorobenzene	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2,4-Trimethylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2-Dibromo-3-chloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2-Dibromoethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2-Dichlorobenzene	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,2-Dichloropropane	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,3,5-Trimethylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,3-Dichlorobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,3-Dichloropropane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
1,4-Dichlorobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
2,2-Dichloropropane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
2-Butanone	0.50	U	0.50	0.50	2.0	ug/L	1	08-Aug-2023 13:39
2-Chlorotoluene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
2-Hexanone	2.0	U	1.0	2.0	2.0	ug/L	1	08-Aug-2023 13:39
4-Chlorotoluene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
4-Isopropyltoluene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
4-Methyl-2-pentanone	2.0	U	0.70	2.0	2.0	ug/L	1	08-Aug-2023 13:39
Acetone	2.0	U	0.40	2.0	2.0	ug/L	1	08-Aug-2023 13:39
Benzene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Bromobenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Bromochloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Bromodichloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Bromoform	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Bromomethane	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Carbon disulfide	2.0	U	0.60	2.0	2.0	ug/L	1	08-Aug-2023 13:39
Carbon tetrachloride	0.50	U	0.50	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Chlorobenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Chloroethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Chloroform	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **ANALYTICAL REPORT**

Project: Longhorn GW Treatment Plant Monthly Effluent Samples WorkOrder:HS23080101

Sample ID: Trip Blank Lab ID:HS23080101-03

Collection Date: 01-Aug-2023 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
Chloromethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
cis-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Dibromochloromethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Dibromomethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Dichlorodifluoromethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Ethylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Hexachlorobutadiene	0.50	U	1.0	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Isopropylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
m,p-Xylene	1.0	U	0.50	1.0	2.0	ug/L	1	08-Aug-2023 13:39
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Aug-2023 13:39
n-Butylbenzene	0.50	U	0.40	0.50	1.0	ug/L	1	08-Aug-2023 13:39
n-Propylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Naphthalene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
o-Xylene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
sec-Butylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Styrene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
tert-Butylbenzene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Tetrachloroethene	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Toluene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
trans-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
trans-1,3-Dichloropropene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Trichlorofluoromethane	0.50	U	0.30	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	08-Aug-2023 13:39
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*1*	*08-Aug-2023 13:39*
Surr: 4-Bromofluorobenzene	*94.3*			**0**	*85-114*	*%REC*	*1*	*08-Aug-2023 13:39*
Surr: Dibromofluoromethane	*102*			**0**	*80-119*	*%REC*	*1*	*08-Aug-2023 13:39*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*08-Aug-2023 13:39*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Batch ID: 198572 **Start Date:** 04 Aug 2023 10:00 **End Date:** 04 Aug 2023 10:00
Method: SV AQ SEP FUN EXTRACT-LOWLEV - 3510C **Prep Code:** 3510_B_SIM

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23080101-01		1000 (mL)	1 (mL)	0.001	1-liter amber glass, Neat

Batch ID: 198597 **Start Date:** 04 Aug 2023 14:00 **End Date:** 04 Aug 2023 14:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23080101-01		10 (mL)	10 (mL)	1	120 plastic HNO3

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 198572 (0)	**Test Name :** SEMIVOLATILES SIM				**Matrix:** Water	
HS23080101-01	LH18/24-SP650_080123	01 Aug 2023 13:00		04 Aug 2023 10:00	10 Aug 2023 12:48	10
Batch ID: 198597 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Water	
HS23080101-01	LH18/24-SP650_080123	01 Aug 2023 13:00		04 Aug 2023 14:00	05 Aug 2023 00:13	1
Batch ID: R443256 (0)	**Test Name :** HEXAVALENT CHROMIUM BY SW7196A				**Matrix:** Water	
HS23080101-01	LH18/24-SP650_080123	01 Aug 2023 13:00			02 Aug 2023 10:35	1
Batch ID: R443493 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23080101-01	LH18/24-SP650_080123	01 Aug 2023 13:00			08 Aug 2023 14:46	1
HS23080101-03	Trip Blank	01 Aug 2023 00:00			08 Aug 2023 13:39	1
Batch ID: R443667 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS23080101-02	LH18/24-SP650_080123_AIX	01 Aug 2023 13:00			10 Aug 2023 12:17	1

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: 198597 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-198597** Units: **mg/L** Analysis Date: **07-Aug-2023 13:13**
Client ID: Run ID: **ICPMS06_443328** SeqNo: **7475858** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.00250	0.00500								U
Lead	0.00125	0.00500								U
Selenium	0.00250	0.00500								U
Silver	0.000500	0.00500								U

LCS Sample ID: **LCS-198597** Units: **mg/L** Analysis Date: **04-Aug-2023 23:25**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474769** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.04636	0.00500	0.05	0	92.7	86 - 114				
Lead	0.04511	0.00500	0.05	0	90.2	88 - 115				
Selenium	0.05016	0.00500	0.05	0	100	80 - 120				
Silver	0.04612	0.00500	0.05	0	92.2	85 - 116				

MS Sample ID: **HS23071878-02MS** Units: **mg/L** Analysis Date: **04-Aug-2023 23:32**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474772** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.2741	0.00500	0.05	0.2241	100	86 - 114				O
Lead	0.04921	0.00500	0.05	0.000796	96.8	88 - 115				
Selenium	0.05257	0.00500	0.05	0.000651	104	80 - 120				
Silver	0.04659	0.00500	0.05	0.000081	93.0	85 - 116				

MSD Sample ID: **HS23071878-02MSD** Units: **mg/L** Analysis Date: **04-Aug-2023 23:34**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474773** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.2865	0.00500	0.05	0.2241	125	86 - 114	0.2741	4.44	20	SO
Lead	0.05217	0.00500	0.05	0.000796	103	88 - 115	0.04921	5.84	20	
Selenium	0.05662	0.00500	0.05	0.000651	112	80 - 120	0.05257	7.41	20	
Silver	0.04815	0.00500	0.05	0.000081	96.1	85 - 116	0.04659	3.31	20	

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: 198597 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

PDS Sample ID: **HS23071878-02PDS** Units: **mg/L** Analysis Date: **04-Aug-2023 23:36**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474774** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Barium	0.3216	0.00500	0.1	0.2241	97.5	80 - 120				
Lead	0.1056	0.00500	0.1	0.000796	105	80 - 120				
Selenium	0.1129	0.00500	0.1	0.000651	112	80 - 120				
Silver	0.08295	0.00500	0.1	0.000081	82.9	80 - 120				

SD Sample ID: **HS23071878-02SD** Units: **mg/L** Analysis Date: **04-Aug-2023 23:29**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474771** PrepDate: **04-Aug-2023** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Barium	0.227	0.0250					0.2241	1.3	10	
Lead	0.00625	0.0250					0.000796	0	10	U
Selenium	0.0125	0.0250					0.000651	0	10	U
Silver	0.00250	0.0250					0.000081	0	10	U

The following samples were analyzed in this batch: HS23080101-01

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: 198572 (0) **Instrument: SV-6** **Method: SEMIVOLATILES SIM**

MBLK Sample ID: **MBLK-198572** Units: **ug/L** Analysis Date: **10-Aug-2023 11:00**
Client ID: Run ID: **SV-6_443683** SeqNo: **7483642** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.010	0.030								U
Surr: 2-Fluorobiphenyl	*0.08941*	*0*	*0.08*	*0*	*112*	*40 - 140*				
Surr: 4-Terphenyl-d14	*0.09409*	*0*	*0.08*	*0*	*118*	*40 - 140*				
Surr: Nitrobenzene-d5	*0.07725*	*0*	*0.08*	*0*	*96.6*	*40 - 140*				

LCS Sample ID: **LCS-198572** Units: **ug/L** Analysis Date: **10-Aug-2023 12:12**
Client ID: Run ID: **SV-6_443683** SeqNo: **7483644** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.05589	0.030	0.08	0	69.9	40 - 140				
Surr: 2-Fluorobiphenyl	*0.09882*	*0*	*0.08*	*0*	*124*	*40 - 140*				
Surr: 4-Terphenyl-d14	*0.08832*	*0*	*0.08*	*0*	*110*	*40 - 140*				
Surr: Nitrobenzene-d5	*0.07961*	*0*	*0.08*	*0*	*99.5*	*40 - 140*				

LCSD Sample ID: **LCSD-198572** Units: **ug/L** Analysis Date: **10-Aug-2023 12:30**
Client ID: Run ID: **SV-6_443683** SeqNo: **7483645** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dioxane	0.05403	0.030	0.08	0	67.5	40 - 140	0.05589	3.37	20	
Surr: 2-Fluorobiphenyl	*0.09929*	*0*	*0.08*	*0*	*124*	*40 - 140*	*0.09882*	*0.474*	*20*	
Surr: 4-Terphenyl-d14	*0.09114*	*0*	*0.08*	*0*	*114*	*40 - 140*	*0.08832*	*3.13*	*20*	
Surr: Nitrobenzene-d5	*0.081*	*0*	*0.08*	*0*	*101*	*40 - 140*	*0.07961*	*1.73*	*20*	

The following samples were analyzed in this batch: HS23080101-01

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230808** Units: **ug/L** Analysis Date: **08-Aug-2023 13:17**
Client ID: Run ID: **VOA9_443493** SeqNo: **7479398** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	0.50	1.0								U
1,1,1-Trichloroethane	0.50	1.0								U
1,1,2,2-Tetrachloroethane	0.50	1.0								U
1,1,2-Trichloroethane	0.50	1.0								U
1,1-Dichloroethane	0.50	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,1-Dichloropropene	0.50	1.0								U
1,2,3-Trichlorobenzene	0.50	1.0								U
1,2,3-Trichloropropane	0.50	1.0								U
1,2,4-Trichlorobenzene	0.50	1.0								U
1,2,4-Trimethylbenzene	0.50	1.0								U
1,2-Dibromo-3-chloropropane	0.50	1.0								U
1,2-Dibromoethane	0.50	1.0								U
1,2-Dichlorobenzene	0.50	1.0								U
1,2-Dichloroethane	0.50	1.0								U
1,2-Dichloropropane	0.50	1.0								U
1,3,5-Trimethylbenzene	0.50	1.0								U
1,3-Dichlorobenzene	0.50	1.0								U
1,3-Dichloropropane	0.50	1.0								U
1,4-Dichlorobenzene	0.50	1.0								U
2,2-Dichloropropane	0.50	1.0								U
2-Butanone	0.50	2.0								U
2-Chlorotoluene	0.50	1.0								U
2-Hexanone	2.0	2.0								U
4-Chlorotoluene	0.50	1.0								U
4-Isopropyltoluene	0.50	1.0								U
4-Methyl-2-pentanone	2.0	2.0								U
Acetone	2.0	2.0								U
Benzene	0.50	1.0								U
Bromobenzene	0.50	1.0								U
Bromochloromethane	0.50	1.0								U
Bromodichloromethane	0.50	1.0								U
Bromoform	0.50	1.0								U
Bromomethane	0.50	1.0								U

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230808** Units: **ug/L** Analysis Date: **08-Aug-2023 13:17**
Client ID: Run ID: **VOA9_443493** SeqNo: **7479398** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	2.0	2.0								U
Carbon tetrachloride	0.50	1.0								U
Chlorobenzene	0.50	1.0								U
Chloroethane	0.50	1.0								U
Chloroform	0.50	1.0								U
Chloromethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
cis-1,3-Dichloropropene	0.50	1.0								U
Dibromochloromethane	0.50	1.0								U
Dibromomethane	0.50	1.0								U
Dichlorodifluoromethane	0.50	1.0								U
Ethylbenzene	0.50	1.0								U
Hexachlorobutadiene	0.50	1.0								U
Isopropylbenzene	0.50	1.0								U
m,p-Xylene	1.0	2.0								U
Methylene chloride	2.0	2.0								U
Naphthalene	0.50	1.0								U
n-Butylbenzene	0.50	1.0								U
n-Propylbenzene	0.50	1.0								U
o-Xylene	0.50	1.0								U
sec-Butylbenzene	0.50	1.0								U
Styrene	0.50	1.0								U
tert-Butylbenzene	0.50	1.0								U
Tetrachloroethene	0.50	1.0								U
Toluene	0.50	1.0								U
trans-1,2-Dichloroethene	0.50	1.0								U
trans-1,3-Dichloropropene	0.50	1.0								U
Trichloroethene	0.50	1.0								U
Trichlorofluoromethane	0.50	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*58.64*	*1.0*	*50*	*0*	*117*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.65*	*1.0*	*50*	*0*	*95.3*	*85 - 114*				
Surr: Dibromofluoromethane	*49.74*	*1.0*	*50*	*0*	*99.5*	*80 - 119*				
Surr: Toluene-d8	*52.57*	*1.0*	*50*	*0*	*105*	*89 - 112*				

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument: VOA9** **Method: VOLATILES ORGANICS BY METHOD 8260C**

LCS Sample ID: **VLCSW-230808** Units: **ug/L** Analysis Date: **08-Aug-2023 12:22**
Client ID: Run ID: **VOA9_443493** SeqNo: **7479397** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	18.73	1.0	20	0	93.6	78 - 124				
1,1,1-Trichloroethane	19.01	1.0	20	0	95.0	74 - 131				
1,1,2,2-Tetrachloroethane	18.1	1.0	20	0	90.5	71 - 121				
1,1,2-Trichloroethane	18.9	1.0	20	0	94.5	80 - 119				
1,1-Dichloroethane	18.67	1.0	20	0	93.4	77 - 125				
1,1-Dichloroethene	19.81	1.0	20	0	99.1	71 - 131				
1,1-Dichloropropene	19.83	1.0	20	0	99.1	78 - 125				
1,2,3-Trichlorobenzene	20.32	1.0	20	0	102	69 - 129				
1,2,3-Trichloropropane	18.52	1.0	20	0	92.6	73 - 122				
1,2,4-Trichlorobenzene	20.67	1.0	20	0	103	69 - 130				
1,2,4-Trimethylbenzene	22.33	1.0	20	0	112	76 - 124				
1,2-Dibromo-3-chloropropane	18.22	1.0	20	0	91.1	62 - 128				
1,2-Dibromoethane	20.18	1.0	20	0	101	77 - 121				
1,2-Dichlorobenzene	19.95	1.0	20	0	99.8	80 - 119				
1,2-Dichloroethane	20.4	1.0	20	0	102	73 - 128				
1,2-Dichloropropane	18.99	1.0	20	0	94.9	78 - 122				
1,3,5-Trimethylbenzene	21.79	1.0	20	0	109	75 - 124				
1,3-Dichlorobenzene	19.82	1.0	20	0	99.1	80 - 119				
1,3-Dichloropropane	19.09	1.0	20	0	95.5	80 - 119				
1,4-Dichlorobenzene	19.28	1.0	20	0	96.4	79 - 118				
2,2-Dichloropropane	20.23	1.0	20	0	101	60 - 139				
2-Butanone	36.86	2.0	40	0	92.1	56 - 143				
2-Chlorotoluene	20.57	1.0	20	0	103	79 - 122				
2-Hexanone	38.93	2.0	40	0	97.3	57 - 139				
4-Chlorotoluene	20.88	1.0	20	0	104	78 - 122				
4-Isopropyltoluene	26.38	1.0	20	0	132	77 - 127				S
4-Methyl-2-pentanone	38.55	2.0	40	0	96.4	67 - 130				
Acetone	40.87	2.0	40	0	102	39 - 160				
Benzene	19.71	1.0	20	0	98.6	79 - 120				
Bromobenzene	19.34	1.0	20	0	96.7	80 - 120				
Bromochloromethane	18.6	1.0	20	0	93.0	78 - 123				
Bromodichloromethane	19.06	1.0	20	0	95.3	79 - 125				
Bromoform	18.72	1.0	20	0	93.6	66 - 130				
Bromomethane	20.61	1.0	20	0	103	53 - 141				

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-230808** Units: **ug/L** Analysis Date: **08-Aug-2023 12:22**
Client ID: Run ID: **VOA9_443493** SeqNo: **7479397** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	35.88	2.0	40	0	89.7	64 - 133				
Carbon tetrachloride	18.47	1.0	20	0	92.3	72 - 136				
Chlorobenzene	19.81	1.0	20	0	99.1	82 - 118				
Chloroethane	18.43	1.0	20	0	92.1	60 - 138				
Chloroform	18.69	1.0	20	0	93.4	79 - 124				
Chloromethane	17.95	1.0	20	0	89.8	50 - 139				
cis-1,2-Dichloroethene	20.42	1.0	20	0	102	78 - 123				
cis-1,3-Dichloropropene	18.06	1.0	20	0	90.3	75 - 124				
Dibromochloromethane	18.91	1.0	20	0	94.6	74 - 126				
Dibromomethane	19.32	1.0	20	0	96.6	79 - 123				
Dichlorodifluoromethane	17.7	1.0	20	0	88.5	32 - 152				
Ethylbenzene	21	1.0	20	0	105	79 - 121				
Hexachlorobutadiene	27.31	1.0	20	0	137	66 - 134				S
Isopropylbenzene	22.36	1.0	20	0	112	72 - 131				
m,p-Xylene	45.85	2.0	40	0	115	80 - 121				
Methylene chloride	19.98	2.0	20	0	99.9	74 - 124				
Naphthalene	19.22	1.0	20	0	96.1	61 - 128				
n-Butylbenzene	20.48	1.0	20	0	102	75 - 128				
n-Propylbenzene	19.82	1.0	20	0	99.1	76 - 126				
o-Xylene	23	1.0	20	0	115	78 - 122				
sec-Butylbenzene	25.03	1.0	20	0	125	77 - 126				
Styrene	23.5	1.0	20	0	117	78 - 123				
tert-Butylbenzene	20.62	1.0	20	0	103	78 - 124				
Tetrachloroethene	19.15	1.0	20	0	95.7	74 - 129				
Toluene	20.11	1.0	20	0	101	80 - 121				
trans-1,2-Dichloroethene	19.21	1.0	20	0	96.0	75 - 124				
trans-1,3-Dichloropropene	18.9	1.0	20	0	94.5	73 - 127				
Trichloroethene	20.27	1.0	20	0	101	79 - 123				
Trichlorofluoromethane	19	1.0	20	0	95.0	65 - 141				
Vinyl chloride	17.23	1.0	20	0	86.1	58 - 137				
Surr: 1,2-Dichloroethane-d4	*52.32*	*1.0*	*50*	*0*	*105*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*54.86*	*1.0*	*50*	*0*	*110*	*85 - 114*				
Surr: Dibromofluoromethane	*51.85*	*1.0*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*49.64*	*1.0*	*50*	*0*	*99.3*	*89 - 112*				

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23080101-01MS** Units: **ug/L** Analysis Date: **08-Aug-2023 15:53**
Client ID: **LH18/24-SP650_080123** Run ID: **VOA9_443493** SeqNo: **7479405** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	20.6	1.0	20	0	103	78 - 124				
1,1,1-Trichloroethane	22.97	1.0	20	0	115	74 - 131				
1,1,2,2-Tetrachloroethane	17.83	1.0	20	0	89.2	71 - 121				
1,1,2-Trichloroethane	19.81	1.0	20	0	99.0	80 - 119				
1,1-Dichloroethane	20.5	1.0	20	0	103	77 - 125				
1,1-Dichloroethene	23.01	1.0	20	0	115	71 - 131				
1,1-Dichloropropene	23.35	1.0	20	0	117	78 - 125				
1,2,3-Trichlorobenzene	20.96	1.0	20	0	105	69 - 129				
1,2,3-Trichloropropane	18.37	1.0	20	0	91.8	73 - 122				
1,2,4-Trichlorobenzene	21.04	1.0	20	0	105	69 - 130				
1,2,4-Trimethylbenzene	24.87	1.0	20	0	124	76 - 124				S
1,2-Dibromo-3-chloropropane	18.05	1.0	20	0	90.2	62 - 128				
1,2-Dibromoethane	21.45	1.0	20	0	107	77 - 121				
1,2-Dichlorobenzene	20.35	1.0	20	0	102	80 - 119				
1,2-Dichloroethane	23.53	1.0	20	0	118	73 - 128				
1,2-Dichloropropane	20.44	1.0	20	0	102	78 - 122				
1,3,5-Trimethylbenzene	24.06	1.0	20	0	120	75 - 124				
1,3-Dichlorobenzene	20.85	1.0	20	0	104	80 - 119				
1,3-Dichloropropane	20.35	1.0	20	0	102	80 - 119				
1,4-Dichlorobenzene	19.35	1.0	20	0	96.8	79 - 118				
2,2-Dichloropropane	24.98	1.0	20	0	125	60 - 139				
2-Butanone	37.56	2.0	40	0	93.9	56 - 143				
2-Chlorotoluene	21.23	1.0	20	0	106	79 - 122				
2-Hexanone	44.8	2.0	40	0	112	57 - 139				
4-Chlorotoluene	22.64	1.0	20	0	113	78 - 122				
4-Isopropyltoluene	29.4	1.0	20	0	147	77 - 127				S
4-Methyl-2-pentanone	42.88	2.0	40	0	107	67 - 130				
Acetone	33.52	2.0	40	0	83.8	39 - 160				
Benzene	21.03	1.0	20	0	105	79 - 120				
Bromobenzene	18.8	1.0	20	0	94.0	80 - 120				
Bromochloromethane	19.43	1.0	20	0	97.1	78 - 123				
Bromodichloromethane	20.92	1.0	20	0	105	79 - 125				
Bromoform	20.4	1.0	20	0	102	66 - 130				
Bromomethane	15.15	1.0	20	0	75.8	53 - 141				

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23080101-01MS** Units: **ug/L** Analysis Date: **08-Aug-2023 15:53**
Client ID: **LH18/24-SP650_080123** Run ID: **VOA9_443493** SeqNo: **7479405** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	50.34	2.0	40	0	126	64 - 133				
Carbon tetrachloride	26.05	1.0	20	0	130	72 - 136				
Chlorobenzene	21	1.0	20	0	105	82 - 118				
Chloroethane	21.07	1.0	20	0	105	60 - 138				
Chloroform	20.4	1.0	20	0	102	79 - 124				
Chloromethane	20	1.0	20	0	100	50 - 139				
cis-1,2-Dichloroethene	24.7	1.0	20	3.503	106	78 - 123				
cis-1,3-Dichloropropene	18.48	1.0	20	0	92.4	75 - 124				
Dibromochloromethane	20.51	1.0	20	0	103	74 - 126				
Dibromomethane	20.64	1.0	20	0	103	79 - 123				
Dichlorodifluoromethane	21.73	1.0	20	0	109	32 - 152				
Ethylbenzene	23.06	1.0	20	0	115	79 - 121				
Hexachlorobutadiene	30.04	1.0	20	0	150	66 - 134				S
Isopropylbenzene	25.91	1.0	20	0	130	72 - 131				
m,p-Xylene	50.67	2.0	40	0	127	80 - 121				S
Methylene chloride	20.51	2.0	20	0	103	74 - 124				
Naphthalene	20.9	1.0	20	0	104	61 - 128				
n-Butylbenzene	23.04	1.0	20	0	115	75 - 128				
n-Propylbenzene	22.15	1.0	20	0	111	76 - 126				
o-Xylene	25.3	1.0	20	0	126	78 - 122				S
sec-Butylbenzene	27.75	1.0	20	0	139	77 - 126				S
Styrene	23.92	1.0	20	0	120	78 - 123				
tert-Butylbenzene	23.26	1.0	20	0	116	78 - 124				
Tetrachloroethene	23.48	1.0	20	0	117	74 - 129				
Toluene	21.94	1.0	20	0	110	80 - 121				
trans-1,2-Dichloroethene	21.43	1.0	20	0	107	75 - 124				
trans-1,3-Dichloropropene	19.28	1.0	20	0	96.4	73 - 127				
Trichloroethene	21.87	1.0	20	0	109	79 - 123				
Trichlorofluoromethane	24.51	1.0	20	0	123	65 - 141				
Vinyl chloride	21.83	1.0	20	0	109	58 - 137				
Surr: 1,2-Dichloroethane-d4	*59.48*	*1.0*	*50*	*0*	*119*	*81 - 118*				S
Surr: 4-Bromofluorobenzene	*54.07*	*1.0*	*50*	*0*	*108*	*85 - 114*				
Surr: Dibromofluoromethane	*52.66*	*1.0*	*50*	*0*	*105*	*80 - 119*				
Surr: Toluene-d8	*53.58*	*1.0*	*50*	*0*	*107*	*89 - 112*				

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23080101-01MSD** Units: **ug/L** Analysis Date: **08-Aug-2023 16:16**
Client ID: **LH18/24-SP650_080123** Run ID: **VOA9_443493** SeqNo: **7479406** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	19.14	1.0	20	0	95.7	78 - 124	20.6	7.34	20	
1,1,1-Trichloroethane	20.41	1.0	20	0	102	74 - 131	22.97	11.8	20	
1,1,2,2-Tetrachloroethane	16.78	1.0	20	0	83.9	71 - 121	17.83	6.1	20	
1,1,2-Trichloroethane	18.65	1.0	20	0	93.3	80 - 119	19.81	6.01	20	
1,1-Dichloroethane	18.42	1.0	20	0	92.1	77 - 125	20.5	10.7	20	
1,1-Dichloroethene	20.53	1.0	20	0	103	71 - 131	23.01	11.4	20	
1,1-Dichloropropene	21.1	1.0	20	0	105	78 - 125	23.35	10.1	20	
1,2,3-Trichlorobenzene	20.9	1.0	20	0	104	69 - 129	20.96	0.301	20	
1,2,3-Trichloropropane	17.88	1.0	20	0	89.4	73 - 122	18.37	2.67	20	
1,2,4-Trichlorobenzene	20.72	1.0	20	0	104	69 - 130	21.04	1.5	20	
1,2,4-Trimethylbenzene	24.2	1.0	20	0	121	76 - 124	24.87	2.74	20	
1,2-Dibromo-3-chloropropane	17.3	1.0	20	0	86.5	62 - 128	18.05	4.24	20	
1,2-Dibromoethane	19.82	1.0	20	0	99.1	77 - 121	21.45	7.91	20	
1,2-Dichlorobenzene	19.34	1.0	20	0	96.7	80 - 119	20.35	5.1	20	
1,2-Dichloroethane	20.86	1.0	20	0	104	73 - 128	23.53	12	20	
1,2-Dichloropropane	18.73	1.0	20	0	93.6	78 - 122	20.44	8.75	20	
1,3,5-Trimethylbenzene	23.36	1.0	20	0	117	75 - 124	24.06	2.97	20	
1,3-Dichlorobenzene	20.06	1.0	20	0	100	80 - 119	20.85	3.84	20	
1,3-Dichloropropane	18.71	1.0	20	0	93.5	80 - 119	20.35	8.38	20	
1,4-Dichlorobenzene	19.19	1.0	20	0	96.0	79 - 118	19.35	0.84	20	
2,2-Dichloropropane	20.99	1.0	20	0	105	60 - 139	24.98	17.4	20	
2-Butanone	33.91	2.0	40	0	84.8	56 - 143	37.56	10.2	20	
2-Chlorotoluene	19.94	1.0	20	0	99.7	79 - 122	21.23	6.27	20	
2-Hexanone	41.2	2.0	40	0	103	57 - 139	44.8	8.38	20	
4-Chlorotoluene	21.43	1.0	20	0	107	78 - 122	22.64	5.52	20	
4-Isopropyltoluene	28.78	1.0	20	0	144	77 - 127	29.4	2.15	20	S
4-Methyl-2-pentanone	39.87	2.0	40	0	99.7	67 - 130	42.88	7.29	20	
Acetone	31.19	2.0	40	0	78.0	39 - 160	33.52	7.2	20	
Benzene	19.51	1.0	20	0	97.6	79 - 120	21.03	7.46	20	
Bromobenzene	19.02	1.0	20	0	95.1	80 - 120	18.8	1.19	20	
Bromochloromethane	17.85	1.0	20	0	89.3	78 - 123	19.43	8.46	20	
Bromodichloromethane	19.44	1.0	20	0	97.2	79 - 125	20.92	7.38	20	
Bromoform	18.68	1.0	20	0	93.4	66 - 130	20.4	8.83	20	
Bromomethane	10.01	1.0	20	0	50.1	53 - 141	15.15	40.8	20	SR

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443493 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23080101-01MSD** Units: **ug/L** Analysis Date: **08-Aug-2023 16:16**
Client ID: **LH18/24-SP650_080123** Run ID: **VOA9_443493** SeqNo: **7479406** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Carbon disulfide	43.5	2.0	40	0	109	64 - 133	50.34	14.6	20	
Carbon tetrachloride	23.38	1.0	20	0	117	72 - 136	26.05	10.8	20	
Chlorobenzene	19.97	1.0	20	0	99.9	82 - 118	21	5.01	20	
Chloroethane	22	1.0	20	0	110	60 - 138	21.07	4.3	20	
Chloroform	18.44	1.0	20	0	92.2	79 - 124	20.4	10.1	20	
Chloromethane	16.77	1.0	20	0	83.9	50 - 139	20	17.6	20	
cis-1,2-Dichloroethene	22.12	1.0	20	3.503	93.1	78 - 123	24.7	11	20	
cis-1,3-Dichloropropene	17.66	1.0	20	0	88.3	75 - 124	18.48	4.51	20	
Dibromochloromethane	18.62	1.0	20	0	93.1	74 - 126	20.51	9.66	20	
Dibromomethane	19.99	1.0	20	0	100.0	79 - 123	20.64	3.16	20	
Dichlorodifluoromethane	18.75	1.0	20	0	93.8	32 - 152	21.73	14.7	20	
Ethylbenzene	21.62	1.0	20	0	108	79 - 121	23.06	6.45	20	
Hexachlorobutadiene	27.9	1.0	20	0	140	66 - 134	30.04	7.39	20	S
Isopropylbenzene	24.26	1.0	20	0	121	72 - 131	25.91	6.6	20	
m,p-Xylene	48.15	2.0	40	0	120	80 - 121	50.67	5.11	20	
Methylene chloride	17.92	2.0	20	0	89.6	74 - 124	20.51	13.5	20	
Naphthalene	21.54	1.0	20	0	108	61 - 128	20.9	3.02	20	
n-Butylbenzene	22.24	1.0	20	0	111	75 - 128	23.04	3.54	20	
n-Propylbenzene	20.93	1.0	20	0	105	76 - 126	22.15	5.67	20	
o-Xylene	23.48	1.0	20	0	117	78 - 122	25.3	7.48	20	
sec-Butylbenzene	26.81	1.0	20	0	134	77 - 126	27.75	3.45	20	S
Styrene	23.11	1.0	20	0	116	78 - 123	23.92	3.43	20	
tert-Butylbenzene	22.67	1.0	20	0	113	78 - 124	23.26	2.55	20	
Tetrachloroethene	22.8	1.0	20	0	114	74 - 129	23.48	2.95	20	
Toluene	20.62	1.0	20	0	103	80 - 121	21.94	6.21	20	
trans-1,2-Dichloroethene	19.23	1.0	20	0	96.2	75 - 124	21.43	10.8	20	
trans-1,3-Dichloropropene	18.34	1.0	20	0	91.7	73 - 127	19.28	5.02	20	
Trichloroethene	20.48	1.0	20	0	102	79 - 123	21.87	6.55	20	
Trichlorofluoromethane	21.23	1.0	20	0	106	65 - 141	24.51	14.3	20	
Vinyl chloride	19.13	1.0	20	0	95.6	58 - 137	21.83	13.2	20	
Surr: 1,2-Dichloroethane-d4	*54.67*	*1.0*	*50*	*0*	*109*	*81 - 118*	*59.48*	*8.42*	*20*	
Surr: 4-Bromofluorobenzene	*52.23*	*1.0*	*50*	*0*	*104*	*85 - 114*	*54.07*	*3.46*	*20*	
Surr: Dibromofluoromethane	*51.96*	*1.0*	*50*	*0*	*104*	*80 - 119*	*52.66*	*1.34*	*20*	
Surr: Toluene-d8	*52.94*	*1.0*	*50*	*0*	*106*	*89 - 112*	*53.58*	*1.19*	*20*	

ALS Houston, US Date: 12-Aug-23

Client:	Bhate Environmental Associates, Inc.
Project:	Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder:	HS23080101

QC BATCH REPORT

Batch ID:	**R443493 (0)**	**Instrument:**	**VOA9**	**Method:**	**VOLATILES ORGANICS BY METHOD 8260C**

The following samples were analyzed in this batch: HS23080101-01 HS23080101-03

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

QC BATCH REPORT

Batch ID: R443256 (0) **Instrument: UV-2450** **Method: HEXAVALENT CHROMIUM BY SW7196A**

MBLK Sample ID: **MBLK-R443256** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473720** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.00600	0.0100								U

LCS Sample ID: **LCS-R443256** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473719** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.236	0.0100	0.25	0	94.4	90 - 111				

MS Sample ID: **HS23080061-01MS** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473726** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	11.5	0.500	12.5	0	92.0	90 - 111				

MSD Sample ID: **HS23080061-01MSD** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473725** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	11.5	0.500	12.5	0	92.0	90 - 111	11.5	0	20	

The following samples were analyzed in this batch: HS23080101-01

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: **HS23080101**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087-2023	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 12-Aug-23

Sample Receipt Checklist

Work Order ID: HS23080101 **Date/Time Received:** 02-Aug-2023 09:30

Client Name: Bhate Environmental **Received by:** Corey Grandits

Completed By: /S/ Corey Grandits (eSignature) 02-Aug-2023 10:48 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	3.7UC/3.6C	IR31
Cooler(s)/Kit(s):	50654	
Date/Time sample(s) sent to storage:	8/2/23	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd., Suite 210 Houston, TX 77099 (281) 530 – 5656 ATTN: Dane Wacasey

HS23080101

Bhate Environmental Associates, Inc.

Longhorn GW Treatment Plant Monthly Effluent Sam

Project: BHATE
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No.
JVPCIBH.0001

Job:
GROUNDWATER TREATMENT PLANT MONTHLY EFFLUENT SAMPLES

Prepared By:
Scott Beesinger

P.O. Number

Ar

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	VOLATILES	SILVER, SELENIUM, LEAD, BARIUM	HEXAVALENT CHROMIUM	1, 4 - DIOXANE	PERCHLORATE						Remarks (Preservatives, etc.)	Lab I.D.#
LH18/24-SP650_080123	Water	08/01/23 / 13:00		3	X										HCL	
LH18/24-SP650_080123	Water	08/01/23 / 13:00		2			X	X							NONE	
LH18/24-SP650_080123_AIX	Water	08/01/23 / 13:00		1					X						NONE	
LH18/24-SP650_080123	Water	08/01/23 / 13:00		1		X									HNO3	
Trip Blank	Water	08/01/23		2	X										HCL	

Additional Remarks: **Standard TAT on all parameters**

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	08/01/23	13:30									

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

3.7° IR#1 90654

(Word) S:\Forms\Chain of Custody - BiWeekly


CUSTODY SEAL
Seal Broken By:
Date:
ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
Date:
Name:
fedex
TRK# 6230 2994 7801
WED - 02 AUG AA
PRIORITY OVERNIGHT
XA SGRA
77099
TX-US
IAH

August 09, 2023 Service Request No:E2300708

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080101

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 02, 2023
For your reference, these analyses have been assigned our service request number **E2300708.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300708
Project:	HS23080101	**Date Received:**	08/02/23
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt.

One sample was received for analysis at ALS Environmental in Houston on 08/02/23.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300381: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300708
Project: HS23080101

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300708-001	LH18/24-SP650_080123_AIX	8/1/2023	1300

Service Request Summary

Folder #: **E2300708**
Client Name: ALS Environmental - US
Project Name: HS23080101
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080101
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300708-001	LH18/24-SP650_080123_AIX	Water	08/01/23 1300	IV

Service Request Summary

Folder #: **E2300708**
Client Name: ALS Environmental - US
Project Name: HS23080101
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080101
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22575

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080101
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080101-02**	**LH18/24-SP650_080123_AIX**	**Water**	**01 Aug 2023 13:00**
	Provide Level II and Level IV reports in separate pdf			09 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: NR Date/Time:

Received By: Date/Time: 8-2-23 1045

Cooler ID(s): Temperature(s):

ALS Environmental

Cooler Receipt Form

Project Chemist JG

Client/Project ALS

Thermometer ID 1231

Date/Time Received: 8-2-23 Initials: LJ

Date/Time Logged in: 8.2.23 Initials LJ

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ Courier (ALS) ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No
   Were they intact? ○ Yes ○ No ☒ N/A
   Were they signed and dated? ○ Yes ○ No ☒ N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-2-23	1049	LJ	5.2	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No
10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300708-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2300709-001	LH18/24-SP140_080123	.01	6850/ClO4 DOD			Water	10mL	
3	E2300711-001	04WW09_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300711-002	04WW10_080123	.02	6850/ClO4 DOD			Ground Water	10mL	
5	E2300711-003	04WW05_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300711-004	04WW11_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300711-005	04WW07_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300711-006	04WW07_080123_a	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300711-007	04WW04_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300711-008	04WW01_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300716-001	1824DPTMW07_080223	.01	6850/ClO4 DOD			Water	10mL	
12	E2300718-001	LH18/24-SP650_080823_Between IX	.01	6850/ClO4 DOD			Water	10mL	
13	E2300718-002	LH18/24-SP650_080823_AIX	.01	6850/ClO4 DOD			Water	10mL	
14	E2300718-003	LH18/24-SP650_080823_BIX	.01	6850/ClO4 DOD			Water	10mL	
15	EQ2300381-01	MB		6850/ClO4			Liquid	10mL	
16	EQ2300381-02	LCS		6850/ClO4			Liquid	10mL	
17	EQ2300381-03	DLCS		6850/ClO4			Liquid	10mL	
18	EQ2300381-04	04WW10_080123 MS	.02	6850/ClO4 DOD			Liquid	10mL	
19	EQ2300381-05	04WW10_080123 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
20	K2308781-001	LGAC-INF-080723	.01	6850/ClO4			Water	10mL	
21	K2308781-002	LGAC-INT1-080723	.01	6850/ClO4			Water	10mL	
22	K2308781-003	LGAC-INT2-080723	.01	6850/ClO4			Water	10mL	
23	R2306562-017	2307210621 PFE-1	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300381-02	1.00µL	EQ2300381-02	1.00µL	EQ2300381-03	1.00µL	EQ2300381-03	1.00µL	EQ2300381-04	1.00µL	EQ2300381-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300708-001	100.00µL	E2300709-001	100.00µL	E2300711-001	100.00µL	E2300711-002	100.00µL	E2300711-003	100.00µL	E2300711-004	100.00µL
E2300711-005	100.00µL	E2300711-006	100.00µL	E2300711-007	100.00µL	E2300711-008	100.00µL	E2300716-001	100.00µL	E2300718-001	100.00µL
E2300718-002	100.00µL	E2300718-003	100.00µL	EQ2300381-01	100.00µL	EQ2300381-01	100.00µL	EQ2300381-02	100.00µL	EQ2300381-02	100.00µL
EQ2300381-03	100.00µL	EQ2300381-03	100.00µL	EQ2300381-04	100.00µL	EQ2300381-05	100.00µL	K2308781-001	100.00µL	K2308781-002	100.00µL
K2308781-003	100.00µL	R2306562-017	100.00µL								

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/9/23 09:01
Finished: 8/9/23 09:53
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP650_080123_AIX	**Units:**	µg/L
Lab Code:	E2300708-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**9.22**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 11:14	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300381-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:23	424245	813305	

Accuracy & Precision

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Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101
Sample Matrix: Water

Service Request: E2300708
Date Analyzed: 8/ 9/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424245

	Lab Control Sample EQ2300381-02			Duplicate Lab Control Sample EQ2300381-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.102	0.100	102	84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:34	424245	813305	

HS23080101-MSVOA-SW8260

ALS WO# HS23080101

01248243

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory
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Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

HS23080101-01	Collected	Received	Matrix	Basis
LH18/24-SP650_080123	08/01/23 13:00	08/02/23 09:30	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,1,2-Tetrachloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,1,1-Trichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,1,2,2-Tetrachloroethane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,1-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,1-Dichloropropene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2,3-Trichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2,3-Trichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2,4-Trichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2,4-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2-Dibromo-3-chloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2-Dibromoethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2-Dichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,2-Dichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,3,5-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,3-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,3-Dichloropropane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
1,4-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
2,2-Dichloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
2-Butanone	ug/L	2.0	U	0.50	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
2-Chlorotoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
2-Hexanone	ug/L	2.0	U	1.0	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
4-Chlorotoluene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
4-Isopropyltoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
4-Methyl-2-pentanone	ug/L	2.0	U	0.70	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Acetone	ug/L	2.0	U	0.40	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Benzene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Bromobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Bromochloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Bromodichloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Bromoform	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

HS23080101-01	Collected	Received	Matrix	Basis
LH18/24-SP650_080123	08/01/23 13:00	08/02/23 09:30	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Bromomethane	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Carbon disulfide	ug/L	2.0	U	0.60	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Carbon tetrachloride	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Chlorobenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Chloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Chloroform	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Chloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
cis-1,2-Dichloroethene	ug/L	3.5		0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
cis-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Dibromochloromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Dibromomethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Dichlorodifluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Ethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Hexachlorobutadiene	ug/L	1.0	U	1.0	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Isopropylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
m,p-Xylene	ug/L	2.0	U	0.50	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Naphthalene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
n-Butylbenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
n-Propylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
o-Xylene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
sec-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Styrene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
tert-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Tetrachloroethene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Toluene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
trans-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
trans-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Trichlorofluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 14:46	VOA9_443493	U080811.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

HS23080101-03

Trip Blank

Collected	Received	Matrix	Basis
08/01/23 00:00	08/02/23 09:30	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,1,2-Tetrachloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,1,1-Trichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,1,2,2-Tetrachloroethane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,1-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,1-Dichloropropene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2,3-Trichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2,3-Trichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2,4-Trichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2,4-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2-Dibromo-3-chloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2-Dibromoethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2-Dichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,2-Dichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,3,5-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,3-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,3-Dichloropropane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
1,4-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
2,2-Dichloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
2-Butanone	ug/L	2.0	U	0.50	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
2-Chlorotoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
2-Hexanone	ug/L	2.0	U	1.0	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
4-Chlorotoluene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
4-Isopropyltoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
4-Methyl-2-pentanone	ug/L	2.0	U	0.70	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Acetone	ug/L	2.0	U	0.40	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Benzene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Bromobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Bromochloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Bromodichloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Bromoform	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

HS23080101-03

Trip Blank

Collected	Received	Matrix	Basis
08/01/23 00:00	08/02/23 09:30	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Bromomethane	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Carbon disulfide	ug/L	2.0	U	0.60	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Carbon tetrachloride	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Chlorobenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Chloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Chloroform	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Chloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
cis-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Dibromochloromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Dibromomethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Dichlorodifluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Ethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Hexachlorobutadiene	ug/L	1.0	U	1.0	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Isopropylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
m,p-Xylene	ug/L	2.0	U	0.50	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Naphthalene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
n-Butylbenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
n-Propylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
o-Xylene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
sec-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Styrene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
tert-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Tetrachloroethene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Toluene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
trans-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
trans-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Trichlorofluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:39	VOA9_443493	U080808.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

VBLKW-230808	Collected	Received	Matrix	Basis
VBLKW-230808	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,1,2-Tetrachloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,1,1-Trichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,1,2,2-Tetrachloroethane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,1-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,1-Dichloropropene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2,3-Trichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2,3-Trichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2,4-Trichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2,4-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2-Dibromo-3-chloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2-Dibromoethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2-Dichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,2-Dichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,3,5-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,3-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,3-Dichloropropane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
1,4-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
2,2-Dichloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
2-Butanone	ug/L	2.0	U	0.50	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
2-Chlorotoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
2-Hexanone	ug/L	2.0	U	1.0	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
4-Chlorotoluene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
4-Isopropyltoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
4-Methyl-2-pentanone	ug/L	2.0	U	0.70	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Acetone	ug/L	2.0	U	0.40	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Benzene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Bromobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Bromochloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Bromodichloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Bromoform	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

VBLKW-230808	Collected	Received	Matrix	Basis
VBLKW-230808	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Bromomethane	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Carbon disulfide	ug/L	2.0	U	0.60	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Carbon tetrachloride	ug/L	1.0	U	0.50	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Chlorobenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Chloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Chloroform	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Chloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
cis-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Dibromochloromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Dibromomethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Dichlorodifluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Ethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Hexachlorobutadiene	ug/L	1.0	U	1.0	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Isopropylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
m,p-Xylene	ug/L	2.0	U	0.50	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Naphthalene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
n-Butylbenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
n-Propylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
o-Xylene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
sec-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Styrene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
tert-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Tetrachloroethene	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Toluene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
trans-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
trans-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Trichlorofluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	08/08/23 13:17	VOA9_443493	U080807.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 2 - System Monitoring Compound Recovery

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Monthly Effluent Samples	HS23080101	

RunID

Volatiles by EPA 8260

VOA9-443493

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	55.27	50	111		80-120
4-Bromofluorobenzene	49.16	50	98.3		80-120
Dibromofluoromethane	50.22	50	100		80-120
Toluene-d8	52.78	50	106		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.61	50	107		80-120
4-Bromofluorobenzene	54.77	50	110		80-120
Dibromofluoromethane	53.03	50	106		80-120
Toluene-d8	48.16	50	96.3		80-120

HS23080101-01	Analyzed	Conc Units	Dilution
LH18/24-SP650_080123	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	59	50	118		81-118
4-Bromofluorobenzene	48	50	95.8		85-114
Dibromofluoromethane	54	50	107		80-119
Toluene-d8	52	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Monthly Effluent Samples	HS23080101	

RunID

Volatiles by EPA 8260

VOA9-443493

HS23080101-01MS	Analyzed	Conc Units	Dilution
LH18/24-SP650_080123	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	59.48	50	119		81-118
4-Bromofluorobenzene	54.07	50	108		85-114
Dibromofluoromethane	52.66	50	105		80-119
Toluene-d8	53.58	50	107		89-112

HS23080101-01MSD	Analyzed	Conc Units	Dilution
LH18/24-SP650_080123	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54.67	50	109		81-118
4-Bromofluorobenzene	52.23	50	104		85-114
Dibromofluoromethane	51.96	50	104		80-119
Toluene-d8	52.94	50	106		89-112

HS23080101-03	Analyzed	Conc Units	Dilution
Trip Blank	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57	50	113		81-118
4-Bromofluorobenzene	47	50	94.3		85-114
Dibromofluoromethane	51	50	102		80-119
Toluene-d8	51	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Monthly Effluent Samples	**HS23080101**	

RunID

Volatiles by EPA 8260

VOA9-443493

VBLKW-230808	Analyzed	Conc Units	Dilution
VBLKW-230808	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	58.64	50	117		81-118
4-Bromofluorobenzene	47.65	50	95.3		85-114
Dibromofluoromethane	49.74	50	99.5		80-119
Toluene-d8	52.57	50	105		89-112

VLCSW-230808	Analyzed	Conc Units	Dilution
VLCSW-230808	08/08/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.32	50	105		81-118
4-Bromofluorobenzene	54.86	50	110		85-114
Dibromofluoromethane	51.85	50	104		80-119
Toluene-d8	49.64	50	99.3		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

www.alsglobal.com

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID VOA9-443493

Volatiles by EPA 8260

LH18/24-SP650_080123 (HS23080101-01)				HS23080101-01MS				HS23080101-01MSD						
Sample Matrix: Aqueous			Run Date	08/08/23				08/08/23						
Result Units: ug/L			Run Time	15:53				16:16						
			Data File	U080814.D				U080815.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,1,2-Tetrachloroethane	78-124	1	0	20.6	20	103		19.14	20	96		20	7.34	
1,1,1-Trichloroethane	74-131	1	0	22.97	20	115		20.41	20	102		20	11.8	
1,1,2,2-Tetrachloroethane	71-121	1	0	17.83	20	89		16.78	20	84		20	6.1	
1,1,2-Trichloroethane	80-119	1	0	19.81	20	99		18.65	20	93		20	6.01	
1,1-Dichloroethane	77-125	1	0	20.5	20	103		18.42	20	92		20	10.7	
1,1-Dichloroethene	71-131	1	0	23.01	20	115		20.53	20	103		20	11.4	
1,1-Dichloropropene	78-125	1	0	23.35	20	117		21.1	20	105		20	10.1	
1,2,3-Trichlorobenzene	69-129	1	0	20.96	20	105		20.9	20	104		20	0.301	
1,2,3-Trichloropropane	73-122	1	0	18.37	20	92		17.88	20	89		20	2.67	
1,2,4-Trichlorobenzene	69-130	1	0	21.04	20	105		20.72	20	104		20	1.5	
1,2,4-Trimethylbenzene	76-124	1	0	24.87	20	124		24.2	20	121		20	2.74	
1,2-Dibromo-3-chloropropane	62-128	1	0	18.05	20	90		17.3	20	86		20	4.24	
1,2-Dibromoethane	77-121	1	0	21.45	20	107		19.82	20	99		20	7.91	
1,2-Dichlorobenzene	80-119	1	0	20.35	20	102		19.34	20	97		20	5.1	
1,2-Dichloroethane	73-128	1	0	23.53	20	118		20.86	20	104		20	12	
1,2-Dichloropropane	78-122	1	0	20.44	20	102		18.73	20	94		20	8.75	
1,3,5-Trimethylbenzene	75-124	1	0	24.06	20	120		23.36	20	117		20	2.97	
1,3-Dichlorobenzene	80-119	1	0	20.85	20	104		20.06	20	100		20	3.84	
1,3-Dichloropropane	80-119	1	0	20.35	20	102		18.71	20	94		20	8.38	
1,4-Dichlorobenzene	79-118	1	0	19.35	20	97		19.19	20	96		20	0.84	
2,2-Dichloropropane	60-139	1	0	24.98	20	125		20.99	20	105		20	17.4	
2-Butanone	56-143	1	0	37.56	40	94		33.91	40	85		20	10.2	
2-Chlorotoluene	79-122	1	0	21.23	20	106		19.94	20	100		20	6.27	
2-Hexanone	57-139	1	0	44.8	40	112		41.2	40	103		20	8.38	
4-Chlorotoluene	78-122	1	0	22.64	20	113		21.43	20	107		20	5.52	
4-Isopropyltoluene	77-127	1	0	29.4	20	147		28.78	20	144		20	2.15	
4-Methyl-2-pentanone	67-130	1	0	42.88	40	107		39.87	40	100		20	7.29	
Acetone	39-160	1	0	33.52	40	84		31.19	40	78		20	7.2	
Benzene	79-120	1	0	21.03	20	105		19.51	20	98		20	7.46	
Bromobenzene	80-120	1	0	18.8	20	94		19.02	20	95		20	1.19	
Bromochloromethane	78-123	1	0	19.43	20	97		17.85	20	89		20	8.46	
Bromodichloromethane	79-125	1	0	20.92	20	105		19.44	20	97		20	7.38	
Bromoform	66-130	1	0	20.4	20	102		18.68	20	93		20	8.83	
Bromomethane	53-141	1	0	15.15	20	76		10.01	20	50		20	40.8	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID VOA9-443493

Volatiles by EPA 8260

LH18/24-SP650_080123 (HS23080101-01)				HS23080101-01MS				HS23080101-01MSD						
Sample Matrix Aqueous			**Run Date**	08/08/23				08/08/23						
Result Units ug/L			**Run Time**	15:53				16:16						
			Data File	U080814.D				U080815.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Carbon disulfide	64-133	1	0	50.34	40	126		43.5	40	109		20	14.6	
Carbon tetrachloride	72-136	1	0	26.05	20	130		23.38	20	117		20	10.8	
Chlorobenzene	82-118	1	0	21	20	105		19.97	20	100		20	5.01	
Chloroethane	60-138	1	0	21.07	20	105		22	20	110		20	4.3	
Chloroform	79-124	1	0	20.4	20	102		18.44	20	92		20	10.1	
Chloromethane	50-139	1	0	20	20	100		16.77	20	84		20	17.6	
cis-1,2-Dichloroethene	78-123	1	3.503	24.7	20	106		22.12	20	93		20	11	
cis-1,3-Dichloropropene	75-124	1	0	18.48	20	92		17.66	20	88		20	4.51	
Dibromochloromethane	74-126	1	0	20.51	20	103		18.62	20	93		20	9.66	
Dibromomethane	79-123	1	0	20.64	20	103		19.99	20	100		20	3.16	
Dichlorodifluoromethane	32-152	1	0	21.73	20	109		18.75	20	94		20	14.7	
Ethylbenzene	79-121	1	0	23.06	20	115		21.62	20	108		20	6.45	
Hexachlorobutadiene	66-134	1	0	30.04	20	150		27.9	20	140		20	7.39	
Isopropylbenzene	72-131	1	0	25.91	20	130		24.26	20	121		20	6.6	
m,p-Xylene	80-121	1	0	50.67	40	127		48.15	40	120		20	5.11	
Methylene chloride	74-124	1	0	20.51	20	103		17.92	20	90		20	13.5	
Naphthalene	61-128	1	0	20.9	20	104		21.54	20	108		20	3.02	
n-Butylbenzene	75-128	1	0	23.04	20	115		22.24	20	111		20	3.54	
n-Propylbenzene	76-126	1	0	22.15	20	111		20.93	20	105		20	5.67	
o-Xylene	78-122	1	0	25.3	20	126		23.48	20	117		20	7.48	
sec-Butylbenzene	77-126	1	0	27.75	20	139		26.81	20	134		20	3.45	
Styrene	78-123	1	0	23.92	20	120		23.11	20	116		20	3.43	
tert-Butylbenzene	78-124	1	0	23.26	20	116		22.67	20	113		20	2.55	
Tetrachloroethene	74-129	1	0	23.48	20	117		22.8	20	114		20	2.95	
Toluene	80-121	1	0	21.94	20	110		20.62	20	103		20	6.21	
trans-1,2-Dichloroethene	75-124	1	0	21.43	20	107		19.23	20	96		20	10.8	
trans-1,3-Dichloropropene	73-127	1	0	19.28	20	96		18.34	20	92		20	5.02	
Trichloroethene	79-123	1	0	21.87	20	109		20.48	20	102		20	6.55	
Trichlorofluoromethane	65-141	1	0	24.51	20	123		21.23	20	106		20	14.3	
Vinyl chloride	58-137	1	0	21.83	20	109		19.13	20	96		20	13.2	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

01248257

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Form 3B

Laboratory Control Sample Recovery

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

SAMPLENUM VLCSW-230808

Volatiles by EPA 8260

VOA9_443493			VLCSW-230808			
Spike Matrix	Aqueous	**Run Date**	08/08/23			
Result Units	ug/L	**Run Time**	12:22			
		Data File	U080805.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,1,2-Tetrachloroethane	78-124	20	18.73	94		
1,1,1-Trichloroethane	74-131	20	19.01	95		
1,1,2,2-Tetrachloroethane	71-121	20	18.1	90		
1,1,2-Trichloroethane	80-119	20	18.9	94		
1,1-Dichloroethane	77-125	20	18.67	93		
1,1-Dichloroethene	71-131	20	19.81	99		
1,1-Dichloropropene	78-125	20	19.83	99		
1,2,3-Trichlorobenzene	69-129	20	20.32	102		
1,2,3-Trichloropropane	73-122	20	18.52	93		
1,2,4-Trichlorobenzene	69-130	20	20.67	103		
1,2,4-Trimethylbenzene	76-124	20	22.33	112		
1,2-Dibromo-3-chloropropane	62-128	20	18.22	91		
1,2-Dibromoethane	77-121	20	20.18	101		
1,2-Dichlorobenzene	80-119	20	19.95	100		
1,2-Dichloroethane	73-128	20	20.4	102		
1,2-Dichloropropane	78-122	20	18.99	95		
1,3,5-Trimethylbenzene	75-124	20	21.79	109		
1,3-Dichlorobenzene	80-119	20	19.82	99		
1,3-Dichloropropane	80-119	20	19.09	96		
1,4-Dichlorobenzene	79-118	20	19.28	96		
2,2-Dichloropropane	60-139	20	20.23	101		
2-Butanone	56-143	40	36.86	92		
2-Chlorotoluene	79-122	20	20.57	103		
2-Hexanone	57-139	40	38.93	97		
4-Chlorotoluene	78-122	20	20.88	104		
4-Isopropyltoluene	77-127	20	26.38	132		
4-Methyl-2-pentanone	67-130	40	38.55	96		
Acetone	39-160	40	40.87	102		
Benzene	79-120	20	19.71	99		
Bromobenzene	80-120	20	19.34	97		
Bromochloromethane	78-123	20	18.6	93		
Bromodichloromethane	79-125	20	19.06	95		
Bromoform	66-130	20	18.72	94		
Bromomethane	53-141	20	20.61	103		

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

SAMPLENUM VLCSW-230808

Volatiles by EPA 8260

VOA9_443493			VLCSW-230808			
Spike Matrix	Aqueous	**Run Date**	08/08/23			
Result Units	ug/L	**Run Time**	12:22			
		Data File	U080805.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
Carbon disulfide	64-133	40	35.88	90		
Carbon tetrachloride	72-136	20	18.47	92		
Chlorobenzene	82-118	20	19.81	99		
Chloroethane	60-138	20	18.43	92		
Chloroform	79-124	20	18.69	93		
Chloromethane	50-139	20	17.95	90		
cis-1,2-Dichloroethene	78-123	20	20.42	102		
cis-1,3-Dichloropropene	75-124	20	18.06	90		
Dibromochloromethane	74-126	20	18.91	95		
Dibromomethane	79-123	20	19.32	97		
Dichlorodifluoromethane	32-152	20	17.7	88		
Ethylbenzene	79-121	20	21	105		
Hexachlorobutadiene	66-134	20	27.31	137		
Isopropylbenzene	72-131	20	22.36	112		
m,p-Xylene	80-121	40	45.85	115		
Methylene chloride	74-124	20	19.98	100		
Naphthalene	61-128	20	19.22	96		
n-Butylbenzene	75-128	20	20.48	102		
n-Propylbenzene	76-126	20	19.82	99		
o-Xylene	78-122	20	23	115		
sec-Butylbenzene	77-126	20	25.03	125		
Styrene	78-123	20	23.5	117		
tert-Butylbenzene	78-124	20	20.62	103		
Tetrachloroethene	74-129	20	19.15	96		
Toluene	80-121	20	20.11	101		
trans-1,2-Dichloroethene	75-124	20	19.21	96		
trans-1,3-Dichloropropene	73-127	20	18.9	94		
Trichloroethene	79-123	20	20.27	101		
Trichlorofluoromethane	65-141	20	19	95		
Vinyl chloride	58-137	20	17.23	86		

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 4

Method Blank Summary

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory
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www.alsglobal.com

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230808	U080807.D	08/08/23 13:17	VOA9_443493
VLCSW-230808	LCS	VLCSW-230808	U080805.D	08/08/23 12:22	VOA9_443493
Trip Blank	SAMP	HS23080101-03	U080808.D	08/08/23 13:39	VOA9_443493
LH18/24-SP650_080123	SAMP	HS23080101-01	U080811.D	08/08/23 14:46	VOA9_443493
LH18/24-SP650_080123	MS	HS23080101-01MS	U080814.D	08/08/23 15:53	VOA9_443493
LH18/24-SP650_080123	MSD	HS23080101-01MSD	U080815.D	08/08/23 16:16	VOA9_443493

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Form 5

Instrument Performance Check

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID VOA9-442900

Volatiles by EPA 8260

Tune File U073101.D 07/31/23 7/31/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.8 (17.8)
75	30.0 - 60.0% of mass 95	46.1 (46.1)
95	Base peak, 100% RA	100 (92.7)
96	5.0 - 9.0% of mass 95	7.1 (7.06)
173	Less than 2.0% of mass 174	0 (0) 1
174	50.0 - 120.0% of mass 95	107.9 (108)
175	4.0 - 9.0% of mass 174	9.6 (8.88) 1
176	93.0 - 101.0% of mass 174	102.5 (95) 1
177	5.0 - 9.0% of mass 176	6.4 (6.2) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	VSTD000.25	ICAL1	7/31/2023	U073102	VSTD000.25
2	VSTD000.5	ICAL2	7/31/2023	U073103	VSTD000.5
3	VSTD001	ICAL3	7/31/2023	U073104	VSTD001
4	VSTD002	ICAL4	7/31/2023	U073105	VSTD002
5	VSTD005	ICAL5	7/31/2023	U073106	VSTD005
6	VSTD020	ICAL6	7/31/2023	U073107	VSTD020
7	VSTD050	ICAL7	7/31/2023	U073108	VSTD050
8	VSTD100	ICAL8	7/31/2023	U073109	VSTD100
9	VSTD150	ICAL9	7/31/2023	U073110	VSTD150
10	VSTD200	ICAL	7/31/2023	U073111	VSTD200
11	CCV	ICV	7/31/2023	U073113	CCV

Form 5 - Instrument Performance Check

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Monthly Effluent Samples	**HS23080101**	

RunID

Volatiles by EPA 8260

VOA9-443493

Tune File U080801.D 08/08/23 8/8/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	18.1 (18.1)
75	30.0 - 60.0% of mass 95	48 (48)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.7 (6.73)
173	Less than 2.0% of mass 174	0 (0) 1
174	50.0 - 120.0% of mass 95	93.5 (93.5)
175	4.0 - 9.0% of mass 174	8.2 (8.77) 1
176	93.0 - 101.0% of mass 174	90.6 (96.8) 1
177	5.0 - 9.0% of mass 176	6.3 (6.93) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	8/8/2023	U080803	CCV
2	CCB	CCB	8/8/2023	U080804	CCB
3	VLCSW-	LCS	8/8/2023	U080805	VLCSW-230808
4	VBLKW-	MBLK	8/8/2023	U080807	VBLKW-230808
5	HS23080101-	SAMP	8/8/2023	U080808	Trip Blank
6	HS23080101-	SAMP	8/8/2023	U080811	LH18/24-SP650_080123
7	HS23080101-	MS	8/8/2023	U080814	HS23080101-01MS
8	HS23080101-	MSD	8/8/2023	U080815	HS23080101-01MSD
9	CCV-END	CCV_EN	8/8/2023	U080816	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	NE 210687	2205 539886	5086 807250	8215 NE	23279	89461	LINR	0.02514	0.49095		0.99596	
Chloromethane	NE 290271	3690 647562	7212 961975	13283 NE	32235	122049	LINR	-0.00694	0.58276		0.99863	
Propionitrile	NE 0.05920	0.06307 0.05653	0.06268 0.05813	0.06102 0.05750	0.06035	0.05576	AVRG		0.05936		4.39631	
Vinyl Chloride	NE 0.44199	0.52506 0.52401	0.47388 0.51500	0.47851 0.49411	0.51863	0.45941	AVRG		0.49229		6.19206	
Bromomethane	NE 140100	1966 279477	3816 430983	6564 NE	17093	63845	LINR	-0.03282	0.25698		0.99936	
Chloroethane	NE 0.27035	0.37431 0.30775	0.33985 0.30347	0.28297 0.29201	0.32412	0.29522	AVRG		0.31000		10.27664	
Trichlorofluoromethane	NE 0.53470	0.64643 0.66656	0.63114 0.63600	0.56594 0.57349	0.64725	0.56680	AVRG		0.60759		7.76235	
Acrolein	NE 0.02882	0.03215 0.03427	0.03340 0.03565	0.03302 0.03384	0.02661	0.03089	AVRG		0.03207		8.90555	
Acetone	NE 169500	6516 334973	8968 501220	11936 658218	23014	78782	LINR	-0.16350	0.14465		0.99841	
1,1-Dichloroethene	NE 0.29942	0.34451 0.35322	0.33466 0.35352	0.30265 0.33279	0.33516	0.30888	AVRG		0.32942		6.33610	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Isobutyl Alcohol	NE 0.07075	0.07585 0.07282	0.06530 0.07358	0.06847 0.07319	0.06729	0.07010	AVRG		0.07082		4.77779	
Acetonitrile	NE 0.04699	0.04927 0.04814	0.04499 0.04825	0.04391 0.04486	0.04308	0.04618	AVRG		0.04619		4.60862	
Allyl Chloride	NE 1.02535	1.24878 1.02699	1.06135 1.04778	1.07336 1.00871	1.00380	0.99845	AVRG		1.05495		7.31219	
Iodomethane	NE 293634	3031 790175	4529 1298909	7768 NE	21659	100586	QUAD	0.06825	3.23212	-0.30725	0.99692	
Acrylonitrile	NE 0.15779	0.15607 0.15385	0.17195 0.15846	0.14876 0.15505	0.16007	0.15249	AVRG		0.15717		4.13652	
Methylene Chloride	NE 200746	2838 426614	5208 668149	8023 909993	23329	81979	LINR	-0.00390	0.39861		0.99989	
Methyl tert-butyl ether	NE 1.00589	1.11528 0.99922	1.00979 1.03321	1.00823 1.02447	0.99548	0.97212	AVRG		1.01819		3.96067	
Carbon Disulfide	NE 0.87704	1.07525 1.02249	0.97784 1.01480	0.87475 0.96521	0.93088	0.89282	AVRG		0.95901		7.37684	
trans-1,2-Dichloroethene	NE 0.33331	0.43393 0.36477	0.41018 0.36922	0.34724 0.35733	0.36355	0.34287	AVRG		0.36916		8.84309	
Vinyl Acetate	NE 1.05109	1.15318 1.09251	1.06270 1.11198	0.94926 1.09070	1.01178	0.98515	AVRG		1.05648		6.12959	
1,1-Dichloroethane	NE 0.58774	0.79526 0.64636	0.74609 0.65230	0.69459 0.62928	0.70116	0.61997	AVRG		0.67475		9.75374	
Chloroprene	NE 0.12012	0.13733 0.15273	0.11339 0.15161	0.10844 0.13850	0.13528	0.12231	AVRG		0.13108		12.13689	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

ICAL Summary Page 3 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
2-Butanone	NE 0.17711	0.22782 0.17835	0.21562 0.17956	0.23512 0.17282	0.19756	0.18390	AVRG		0.19643		12.14292	
Methacrylonitrile	NE 0.27383	0.30192 0.27396	0.32895 0.29187	0.27086 0.26364	0.26267	0.25948	AVRG		0.28080		8.12023	
2,2-Dichloropropane	NE 0.43156	0.45075 0.49526	0.50770 0.49454	0.41978 0.46743	0.46872	0.45135	AVRG		0.46523		6.44052	
cis-1,2-Dichloroethene	NE 0.38456	0.44351 0.41841	0.38487 0.41562	0.42571 0.41037	0.41943	0.40614	AVRG		0.41207		4.55319	
Chloroform	NE 0.71008	0.92961 0.76241	0.81061 0.75821	0.81039 0.73078	0.79494	0.76000	AVRG		0.78523		8.14411	
Bromochloromethane	NE 0.22001	0.25444 0.23714	0.26287 0.24180	0.27742 0.21850	0.24920	0.23313	AVRG		0.24383		7.94854	
1,1,1-Trichloroethane	NE 0.55252	0.65643 0.65158	0.62316 0.63910	0.60775 0.60135	0.59613	0.57008	AVRG		0.61090		5.80673	
1,1-Dichloropropene	NE 0.32875	0.40730 0.40402	0.38489 0.39284	0.32532 0.36621	0.37601	0.35612	AVRG		0.37127		8.09057	
1,2-Dichloroethane	NE 0.41193	0.47818 0.42517	0.42119 0.41679	0.42915 0.40499	0.45883	0.42895	AVRG		0.43057		5.43320	
Carbon Tetrachloride	NE 0.29491	0.38160 0.38417	0.29089 0.37634	0.31260 0.34365	0.31185	0.29742	AVRG		0.33260		11.80148	
Benzene	NE 1.12474	1.37619 1.22368	1.26965 1.20168	1.18628 1.15723	1.27860	1.17437	AVRG		1.22138		6.26624	
Trichloroethene	NE 0.31077	0.39657 0.35516	0.32583 0.35154	0.35876 0.33530	0.34686	0.32606	AVRG		0.34521		7.23446	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromodichloromethane	NE 0.37102	0.39112 0.40737	0.39012 0.41081	0.38895 0.40081	0.38300	0.37250	AVRG		0.39063		3.58195	
Methyl Methacrylate	NE 0.45169	0.50632 0.44421	0.38518 0.46667	0.38394 0.45770	0.39298	0.39950	AVRG		0.43202		10.02406	
2-Chloroethylvinyl ether	NE 8568	114 17476	186 27126	335 NE	737	3649	LINR	-0.02191	0.00561		0.99979	
1,2-Dichloropropane	NE 0.30980	0.39218 0.32731	0.31924 0.32414	0.31675 0.31525	0.32114	0.32029	AVRG		0.32734		7.58708	
2-Nitropropane	NE 0.11734	0.14074 0.11953	0.09637 0.13174	0.10711 0.13173	0.11448	0.10120	AVRG		0.11780		12.65451	
Dibromomethane	NE 0.20056	0.21460 0.20633	0.21392 0.20346	0.22590 0.20217	0.21911	0.20622	AVRG		0.21025		4.09444	
4-Methyl-2-Pentanone	NE 0.38089	0.39006 0.38106	0.37301 0.38720	0.35059 0.37830	0.33890	0.36829	AVRG		0.37203		4.58417	
cis-1,3-Dichloropropene	NE 332624	3082 774336	4923 1255756	9984 1704761	24292	121394	LINR	0.04404	0.52092		0.99891	
Ethyl Methacrylate	NE 0.47025	0.47999 0.48104	0.41360 0.50051	0.40215 0.50137	0.44072	0.43657	AVRG		0.45847		7.97646	
Toluene	NE 1.31532	1.55344 1.43991	1.22059 1.39615	1.17375 1.32407	1.42771	1.38367	AVRG		1.35940		8.53378	
trans-1,3-Dichloropropene	NE 0.37683	0.39687 0.42779	0.32196 0.43704	0.32873 0.44041	0.32012	0.33895	AVRG		0.37652		13.49040	
2-Hexanone	NE 0.24862	0.24712 0.25518	0.22352 0.25670	0.25080 0.25265	0.23481	0.24777	AVRG		0.24635		4.32128	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
1,1,2-Trichloroethane	NE 0.27285	0.32793 0.27354	0.35553 0.27154	0.29200 0.26266	0.28919	0.27515	AVRG		0.29115		10.58600	
1,3-Dichloropropane	NE 0.57089	0.71298 0.58339	0.59195 0.58210	0.57169 0.55891	0.61249	0.59083	AVRG		0.59725		7.70338	
Dibromochloromethane	NE 0.35792	0.40009 0.38513	0.33426 0.39499	0.30395 0.38437	0.31836	0.33671	AVRG		0.35731		9.93273	
Tetrachloroethene	NE 0.28509	0.36304 0.34834	0.35268 0.33578	0.31548 0.30976	0.34950	0.31486	AVRG		0.33050		7.72972	
1,2-Dibromoethane	NE 0.35081	0.39475 0.34983	0.35909 0.34883	0.32573 0.33700	0.34508	0.34115	AVRG		0.35025		5.47989	
1-Chlorohexane	NE 0.20855	0.27808 0.29712	0.27020 0.28117	0.26046 0.26499	0.24548	0.24381	AVRG		0.26109		9.94291	
Chlorobenzene	NE 0.88349	1.10870 0.95885	0.99066 0.93838	0.96470 0.89377	0.98950	0.94498	AVRG		0.96367		6.83984	
1,1,1,2-Tetrachloroethane	NE 0.33092	0.42840 0.35916	0.33600 0.35862	0.31830 0.34985	0.34072	0.33909	AVRG		0.35123		9.03803	
Ethylbenzene	NE 0.40552	0.50007 0.48460	0.39089 0.46935	0.38651 0.44718	0.42155	0.42069	AVRG		0.43626		9.43737	
m,p-Xylenes	NE 0.49522	0.52094 0.59843	0.45610 0.58141	0.41819 0.54890	0.47853	0.51172	AVRG		0.51216		11.35507	
o-Xylene	NE 0.49595	0.52304 0.57678	0.41034 0.56670	0.40767 0.54132	0.47466	0.51293	AVRG		0.50104		12.21428	
Styrene	NE 0.80748	0.76847 0.92446	0.62770 0.91819	0.64721 0.89516	0.68025	0.76772	AVRG		0.78185		14.65400	

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Initial Calibration Data

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Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromoform	NE 0.24851	0.25384 0.27219	0.21751 0.27520	0.24681 0.27372	0.23077	0.22808	AVRG		0.24962		8.52328	
Isopropylbenzene	NE 1.12488	1.13297 1.47687	1.03567 1.41043	1.04427 1.31835	1.16356	1.20468	AVRG		1.21241		12.92024	
1,1,2,2-Tetrachloroethane	NE 0.89152	1.15683 0.88591	1.06739 0.86691	1.06810 0.84501	0.98697	0.89907	AVRG		0.96308		11.51466	
1,2,3-Trichloropropane	NE 0.80375	0.85788 0.84920	0.85020 0.85611	0.82513 0.85558	0.83704	0.81178	AVRG		0.83852		2.43363	
trans-1,4-Dichloro-2-butene	NE 0.06178	0.06827 0.07281	0.06336 0.07901	0.06062 0.08039	0.06370	0.05857	AVRG		0.06761		11.91040	
n-Propylbenzene	NE 850858	7058 2371517	13048 3432693	26996 4612232	77798	353551	LINR	0.03281	2.90904		0.99629	
Bromobenzene	NE 0.76463	0.89034 0.83642	0.88535 0.82181	0.81725 0.80162	0.83590	0.79125	AVRG		0.82718		4.96971	
1,3,5-Trimethylbenzene	NE 1.58473	1.75472 2.06489	1.52111 2.01814	1.52279 1.94220	1.65270	1.66530	AVRG		1.74740		12.07099	
2-Chlorotoluene	NE 1.61585	1.88455 1.91617	1.67945 1.83780	1.66186 1.76745	1.74020	1.76147	AVRG		1.76276		5.78656	
4-Chlorotoluene	NE 1.86068	2.03419 2.16711	1.75120 2.09349	1.78532 2.00836	2.01103	2.00945	AVRG		1.96898		7.11166	
tert-Butylbenzene	NE 1.49099	1.68266 2.00142	1.31876 1.91707	1.41555 1.79993	1.64950	1.62304	AVRG		1.65544		13.65515	
1,2,4-Trimethylbenzene	NE 1.63450	1.63072 2.00886	1.50499 1.98701	1.59285 1.93814	1.83131	1.79716	AVRG		1.76950		10.50228	

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Initial Calibration Data

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Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
sec-Butylbenzene	NE 678780	5696 2006353	11030 NE	23804 NE	69225	286254	QUAD	-0.01399	0.61960	-0.04483	0.99890	
p-Isopropyltoluene	NE 559357	5403 1676245	9596 NE	21012 NE	56898	235209	QUAD	-0.01563	0.75564	-0.06734	0.99896	
1,3-Dichlorobenzene	NE 1.23032	1.60508 1.42825	1.34617 1.39492	1.32958 1.34305	1.41910	1.32879	AVRG		1.38058		7.45823	
1,4-Dichlorobenzene	NE 1.31394	1.81022 1.47667	1.73862 1.43193	1.61360 1.38005	1.58817	1.41593	AVRG		1.52990		11.01191	
Benzyl Chloride	NE 205616	1941 491153	3936 859193	6493 1221448	15238	70588	LINR	0.08214	0.38559		0.99516	
n-Butylbenzene	NE 474213	4114 1404287	8159 2119417	17310 2783598	44805	200492	LINR	0.04782	1.76975		0.99509	
1,2-Dichlorobenzene	NE 1.27628	1.57230 1.41885	1.53433 1.37677	1.44760 1.32071	1.44536	1.35616	AVRG		1.41649		6.79067	
1,2-Dibromo-3-Chloropropane	NE 0.12632	0.14509 0.14514	0.15108 0.15032	0.13773 0.15387	0.12446	0.11566	AVRG		0.13885		9.82242	
1,2,4-Trichlorobenzene	NE 0.82790	0.87931 1.01876	0.78168 1.01424	0.72674 0.99081	0.77401	0.82891	AVRG		0.87137		12.74046	
Hexachlorobutadiene	NE 112500	1126 351435	2531 NE	5519 NE	13619	49415	QUAD	-0.02795	3.78481	-1.71367	0.99821	
Naphthalene	NE 769637	6182 1846543	11725 2827642	22645 3794466	51655	276874	LINR	0.03183	2.37702		0.99886	
1,2,3-Trichlorobenzene	NE 0.82676	1.04484 0.99128	0.76072 0.98013	0.83361 0.94656	0.78788	0.83457	AVRG		0.88960		11.44647	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Ethyl Acetate	NE 0.43204	0.52740 0.43062	0.50199 0.43054	0.42517 0.42108	0.46491	0.43529	AVRG		0.45212		8.43066	
Methyl Acrylate	NE 0.46735	0.52634 0.45725	0.51288 0.47346	0.47227 0.46921	0.47069	0.45552	AVRG		0.47833		5.11332	
n-Butanol	NE 0.01264	0.01550 0.01315	0.01487 0.01382	0.01381 0.01385	0.01108	0.01128	AVRG		0.01333		11.12185	
Ethyl Acrylate	NE 1.08269	0.93898 1.15967	0.99143 1.17300	0.87739 1.13262	0.88314	1.03560	AVRG		1.03050		11.12950	
Cyclohexanone	NE 0.03037	0.03773 0.02918	0.03169 0.02981	0.03259 0.02942	0.02743	0.03001	AVRG		0.03091		9.54305	
1,4-Dioxane	0.00807 0.00665	0.00860 0.00627	0.00802 0.00620	0.00780 0.00611	0.00716	0.00680	AVRG		0.00717		12.54606	
n-Hexane	NE 0.27118	0.38411 0.43277	0.34794 0.41787	0.35855 0.37300	0.36686	0.31429	AVRG		0.36295		13.59891	
Freon TF	NE 133548	1250 376621	3343 NE	5602 NE	16029	59963	QUAD	-0.02403	4.39261	-2.16232	0.99789	
Methyl Acetate	NE 0.33112	0.42414 0.32801	0.40074 0.34056	0.38319 0.32784	0.35406	0.33930	AVRG		0.35877		9.86973	
Methylcyclohexane	NE 0.74949	0.75489 0.80127	0.68423 0.80994	0.63981 0.78324	0.61500	0.71662	AVRG		0.72828		9.57636	
Isopropyl alcohol	NE 0.02599	0.03169 0.02556	0.03143 0.02686	0.03125 0.02613	0.02516	0.02463	AVRG		0.02763		10.62773	
Amyl alcohol	NE 0.00992	0.00933 0.01068	0.01077 0.01120	0.01025 0.01126	0.00871	0.00967	AVRG		0.01020		8.50391	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Allyl alcohol	NE 141423	1755 459706	3354 NE	6722 NE	18282	63877	QUAD	-0.61034	84.68604	-43.56216	0.99752	
4-Methyl-2-pentanol	NE 0.06586	0.06162 0.06887	0.05487 0.07404	0.06416 0.07493	0.05455	0.06625	AVRG		0.06502		11.16525	
Tert-butyl alcohol	NE 427118	5912 876760	11049 1418139	21792 1911477	44536	172724	LINR	-0.06239	0.04191		0.99982	
Diethyl ether	NE 0.28335	0.29000 0.28634	0.27179 0.29471	0.27465 0.29201	0.28119	0.27386	AVRG		0.28310		2.95718	
1,3-Butadiene	NE 0.36549	0.42137 0.44407	0.36142 0.43695	0.38543 0.40437	0.39948	0.36451	AVRG		0.39812		7.89458	
Cyclohexane	NE 0.46619	0.50739 0.68232	0.53228 0.64576	0.54556 0.58534	0.55073	0.54220	AVRG		0.56197		11.91538	
Tetrahydrofuran	NE 0.08361	0.09581 0.07797	0.09077 0.08203	0.08518 0.07963	0.08274	0.07526	AVRG		0.08367		7.59865	
alpha-Methylstyrene	NE 245723	1830 679309	3510 1101168	7992 1515973	21160	95125	LINR	0.07437	0.94175		0.99609	
Diisopropyl ether	NE 1.13698	1.25197 1.14127	1.30077 1.16955	1.23908 1.15292	1.13582	1.10431	AVRG		1.18141		5.60782	
Dichlorofluoromethane	NE 0.64037	0.70051 0.66674	0.69650 0.67591	0.63117 0.65212	0.62816	0.64669	AVRG		0.65980		4.06002	
Butyl acrylate	NE 412223	3138 902217	4545 1506361	11622 2123462	29316	146625	LINR	0.04999	0.67060		0.99846	
Butyl methacrylate	NE 0.70843	0.69624 0.69530	0.47517 0.68569	0.57049 0.67752	0.51352	0.64302	AVRG		0.62949		13.91869	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

ICAL Summary Page 10 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dicyclopentadiene	NE 2.21106	1.96570 2.39558	1.89454 2.43513	1.80220 2.32394	1.88899	2.15831	AVRG		2.11950		11.25950	
1,2,3-Trimethylbenzene	NE 1.79804	1.82320 1.84170	1.68412 1.85455	1.68975 1.83115	1.70207	1.83779	AVRG		1.78471		3.99767	
Ethanol	NE 55961	749 111476	1210 177398	2145 232260	5504	20900	LINR	-0.27612	0.00516		0.99938	
tert-Butyl formate	NE 0.33829	0.39965 0.35637	0.40370 0.37833	0.37378 0.38362	0.34312	0.32624	AVRG		0.36701		7.48195	
3,3-Dimethyl-1-butanol	NE 0.03471	0.04702 0.03429	0.03157 0.03667	0.04138 0.03639	0.03458	0.03693	AVRG		0.03706		12.36612	
tert-Amyl methyl ether	NE 577923	5246 1310498	8905 2015550	17751 2719668	43846	202905	LINR	0.02283	1.20807		0.99932	
tert-Butyl ethyl ether	NE 0.97228	0.98646 0.99590	0.97296 1.05407	0.88592 1.04592	0.90108	0.90693	AVRG		0.96906		6.27455	
tert-Amyl alcohol	NE 0.03383	0.04273 0.03564	0.04045 0.03783	0.03994 0.03836	0.03431	0.03262	AVRG		0.03730		9.16293	
Epichlorohydrin	NE 8907	99. 25123	166 NE	503 NE	991	2557	QUAD	-0.03680	406	-4920	0.99782	
Isoprene	NE 0.08820	0.10454 0.10957	0.08600 0.10889	0.09537 0.09888	0.09078	0.09354	AVRG		0.09731		8.97873	
n-Amyl acetate	NE 0.56962	0.58193 0.58520	0.53350 0.60073	0.54094 0.59273	0.55207	0.58144	AVRG		0.57091		4.13415	
Isopropyl acetate	NE 0.98035	1.06592 1.00633	0.85168 1.01698	0.95203 1.01279	0.94821	0.97012	AVRG		0.97827		6.13832	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
n-Butyl acetate	NE 0.57836	0.49473 0.60636	0.53057 0.62611	0.48794 0.61794	0.48642	0.53903	AVRG		0.55194		10.28930	
Acetaldehyde	NE 0.07083	NE 0.06492	NE 0.06299	0.07510 0.06020	0.06817	0.05728	AVRG		0.06564		9.42908	
Methyl Amyl Ketone	NE 0.70597	0.69259 0.69656	0.54433 0.73897	0.65695 0.74098	0.59904	0.70207	AVRG		0.67527		9.66555	
Dimethyl Disulfide	NE 220128	453 615910	917 1180966	2883 1720035	9195	58623	QUAD	0.08388	2.51252	-0.34354	0.99519	
Isobutylene	NE 0.05708	NE 0.06038	0.07220 0.05950	0.06182 0.05728	0.06042	0.06033	AVRG		0.06113		7.78993	
2-Ethylhexyl Acrylate	NE 180110	1311 428559	2603 725138	4677 1027307	11853	61419	QUAD	0.03314	1.91291	-0.14110	0.99915	
94 1,2-Dichloroethylene (total)	NE 0.35894	0.43872 0.39159	0.39753 0.39242	0.38647 0.38385	0.39149	0.37450	AVRG		0.39061		5.50045	
95 Xylenes (total)	NE 0.46183	0.48729 0.56181	0.39904 0.54139	0.39749 0.52358	0.44946	0.47866	AVRG		0.47784		12.15772	
30 Dibromofluoromethane	NE 213944	2118 432647	4835 673185	7770 879652	19210	85217	LINR	-0.01990	0.39210		0.99908	
35 1,2-Dichloroethane-d4	NE 242144	2440 469501	4638 729852	8650 950577	21416	92644	LINR	-0.02675	0.42417		0.99870	
48 Toluene-d8	NE 1.15709	1.39328 1.16538	1.27319 1.13419	1.04667 1.07750	1.05916	1.16021	AVRG		1.16296		9.50122	
69 4-Bromofluorobenzene	NE 329909	5057 681158	8707 1028731	12870 1374126	29702	131600	LINR	-0.02776	0.44164		0.99886	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

ICAL Summary Page 12 / 12

Compound	0.250 Level 1	0.500 Level 2	1.00 Level 3	2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
	50.00 Level 7	100.00 Level 8	150.00 Level 9	200.00 Level 10								

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id CCV
Level LOW
Fraction VOA
Client Smp ID CCV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.00	45.17	90.34	80-120	
1,1,1-Trichloroethane	50.00	42.24	84.50	80-120	
1,1,2,2-Tetrachloroethane	50.00	43.44	86.89	80-120	
Freon TF	50.00	49.80	99.61	80-120	
Methyl Acetate	50.00	42.65	85.31	80-120	
Cyclohexane	50.00	42.99	86.00	80-120	
Methylcyclohexane	50.00	45.62	91.25	80-120	
Carbon Disulfide	100.00	91.76	91.77	80-120	
2-Hexanone	100.00	100.88	100.88	80-120	
1,1,2-Trichloroethane	50.00	44.48	88.97	80-120	
1,1-Dichloroethane	50.00	42.37	84.75	80-120	
1,1-Dichloroethene	50.00	44.44	88.88	80-120	
1,1-Dichloropropene	50.00	44.90	89.82	80-120	
1,2,3-Trichlorobenzene	50.00	46.01	92.02	80-120	
1,2,3-Trichloropropane	50.00	47.51	95.03	80-120	
1,2,4-Trichlorobenzene	50.00	48.56	97.14	80-120	
1,2,4-Trimethylbenzene	50.00	49.50	99.00	80-120	
1,2-Dibromo-3-Chloropropane	50.00	44.93	89.87	80-120	
1,2-Dibromoethane	50.00	46.64	93.29	80-120	
Acrolein	100.00	81.57	81.57	80-120	
Acrylonitrile	100.00	93.98	93.99	80-120	
1,2-Dichlorobenzene	50.00	43.41	86.82	80-120	
1,2-Dichloroethane	50.00	45.00	90.01	80-120	
1,2-Dichloropropane	50.00	45.48	90.96	80-120	
1,3,5-Trimethylbenzene	50.00	47.94	95.89	80-120	
1,3-Dichlorobenzene	50.00	44.62	89.24	80-120	
1,3-Dichloropropane	50.00	45.54	91.09	80-120	
1,4-Dichlorobenzene	50.00	42.01	84.03	80-120	
1-Chlorohexane	50.00	40.54	81.09	80-120	
2,2-Dichloropropane	50.00	46.62	93.25	80-120	
2-Butanone	100.00	89.06	89.06	80-120	
2-Chloroethylvinyl ether	100.00	84.06	84.07	80-120	
2-Chlorotoluene	50.00	45.59	91.19	80-120	
4-Chlorotoluene	50.00	46.97	93.95	80-120	

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id CCV
Level LOW
Fraction VOA
Client Smp ID CCV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	53.01	106.02	80-120	
4-Methyl-2-Pentanone	100.00	98.85	98.85	80-120	
Acetone	100.00	103.24	103.25	80-120	
Acetonitrile	500.00	470.91	94.18	80-120	
Allyl Chloride	50.00	46.42	92.85	80-120	
Benzene	50.00	45.01	90.03	80-120	
Bromobenzene	50.00	45.44	90.89	80-120	
Bromochloromethane	50.00	42.35	84.70	80-120	
Bromodichloromethane	50.00	45.28	90.58	80-120	
Bromoform	50.00	48.92	97.85	80-120	
Bromomethane	50.00	53.47	106.94	80-120	
Carbon Tetrachloride	50.00	41.33	82.68	80-120	
Chlorobenzene	50.00	45.65	91.30	80-120	
Chloroethane	50.00	43.56	87.13	80-120	
Chloroform	50.00	42.70	85.41	80-120	
Chloromethane	50.00	44.76	89.52	80-120	
Chloroprene	50.00	44.88	89.77	80-120	
cis-1,2-Dichloroethene	50.00	45.41	90.82	80-120	
cis-1,3-Dichloropropene	50.00	45.07	90.15	80-120	
Dibromochloromethane	50.00	48.92	97.84	80-120	
Dibromomethane	50.00	45.39	90.79	80-120	
Dichlorodifluoromethane	50.00	41.50	83.00	80-120	
Ethylbenzene	50.00	46.95	93.92	80-120	
Ethyl Methacrylate	50.00	49.83	99.67	80-120	
Iodomethane	100.00	89.77	89.77	80-120	
Isobutyl Alcohol	1000.00	936.97	93.70	70-130	
Propionitrile	500.00	466.26	93.25	70-130	
Hexachlorobutadiene	50.00	55.99	112.00	80-120	
Isopropylbenzene	50.00	48.03	96.06	80-120	
m,p-Xylenes	100.00	100.35	100.36	80-120	
Methyl tert-butyl ether	50.00	47.22	94.46	80-120	
Methylene Chloride	50.00	46.60	93.22	80-120	
Methacrylonitrile	50.00	42.40	84.80	80-120	
Methyl Methacrylate	50.00	48.84	97.70	80-120	

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_442900

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id CCV
Level LOW
Fraction VOA
Client Smp ID CCV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	42.16	84.32	80-120	
n-Propylbenzene	50.00	42.94	85.89	80-120	
Naphthalene	50.00	44.85	89.71	80-120	
o-Xylene	50.00	50.38	100.78	80-120	
sec-Butylbenzene	50.00	51.05	102.11	80-120	
Styrene	50.00	53.12	106.24	80-120	
tert-Butylbenzene	50.00	45.24	90.50	80-120	
Tetrachloroethene	50.00	43.34	86.69	80-120	
Toluene	50.00	47.16	94.32	80-120	
trans-1,2-Dichloroethene	50.00	43.87	87.75	80-120	
trans-1,3-Dichloropropene	50.00	49.98	99.96	80-120	
trans-1,4-Dichloro-2-butene	50.00	51.75	103.50	80-120	
Trichloroethene	50.00	44.46	88.93	80-120	
Trichlorofluoromethane	50.00	41.79	83.60	80-120	
Vinyl Acetate	100.00	96.93	96.94	80-120	
Vinyl Chloride	50.00	44.04	88.08	80-120	
1,2-Dichloroethylene (total)	100.00	89.28	89.29	80-120	
Xylenes (total)	150.00	150.74	100.50	80-120	
1,4-Dioxane	1000.00	803.55	80.36	80-120	
Dibromofluoromethane	50.00	48.57	97.14	71-125	
1,2-Dichloroethane-d4	50.00	47.76	95.53	70-125	
Toluene-d8	50.00	50.60	101.21	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

www.alsglobal.com

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_443493

Volatiles by EPA 8260

Instrument ID VOA9.I
Lab File ID U080803.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :37
ICAL Date(s) 31-JUL-2023 31-JUL-2023
ICAL Times :30 15:13
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	40.16467	0.38203	0.100	19.67066	20.0	Linear	
Chloromethane	50.0	44.33566	0.52078	0.100	11.32868	20.0	Linear	
Vinyl Chloride	0.49229	0.40825	0.40825	0.100	17.07053	20.0	Averaged	
Bromomethane	50.0	49.53799	0.26304	0.100	0.92403	20.0	Linear	
Chloroethane	0.31000	0.27587	0.27587	0.100	11.00969	20.0	Averaged	
Trichlorofluoromethane	0.60759	0.53814	0.53814	0.100	11.43054	20.0	Averaged	
Acrolein	0.03207	0.02869	0.02869	0.010	10.52826	20.0	Averaged	
Acetone	100	105	0.16421	0.100	-5.34397	20.0	Linear	
1,1-Dichloroethene	0.32942	0.31072	0.31072	0.100	5.67731	20.0	Averaged	
Iodomethane	100	101	0.32162	0.100	-1.00779	20.0	Quadratic	
Acrylonitrile	0.15717	0.16676	0.16676	0.050	-6.10427	20.0	Averaged	
Methylene Chloride	50.0	50.11342	0.40107	0.100	-0.22683	20.0	Linear	
Methyl tert-butyl ether	1.01819	1.21734	1.21734	0.100	-19.55943	20.0	Averaged	
Carbon Disulfide	0.95901	0.84997	0.84997	0.100	11.37031	20.0	Averaged	
trans-1,2-Dichloroethene	0.36916	0.34710	0.34710	0.100	5.97381	20.0	Averaged	
Vinyl Acetate	1.05648	1.18295	1.18295	0.010	-11.97012	20.0	Averaged	
1,1-Dichloroethane	0.67475	0.63801	0.63801	0.200	5.44447	20.0	Averaged	
2-Butanone	0.19643	0.17927	0.17927	0.100	8.73521	20.0	Averaged	
2,2-Dichloropropane	0.46523	0.47168	0.47168	0.100	-1.38672	20.0	Averaged	
cis-1,2-Dichloroethene	0.41207	0.41575	0.41575	0.100	-0.89356	20.0	Averaged	
Chloroform	0.78523	0.70023	0.70023	0.200	10.82427	20.0	Averaged	
Bromochloromethane	0.24383	0.23419	0.23419	0.100	3.95429	20.0	Averaged	
30 Dibromofluoromethane	50.0	53.02796	0.42365	0.100	-6.05592	20.0	Linear	
1,1,1-Trichloroethane	0.61090	0.55410	0.55410	0.100	9.29704	20.0	Averaged	
1,1-Dichloropropene	0.37127	0.34257	0.34257	0.100	7.72996	20.0	Averaged	
1,2-Dichloroethane	0.43057	0.43358	0.43358	0.100	-0.69826	20.0	Averaged	
Carbon Tetrachloride	0.33260	0.28896	0.28896	0.100	13.12227	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	53.60700	0.46612	0.100	-7.21400	20.0	Linear	
Benzene	1.22138	1.13844	1.13844	0.500	6.79061	20.0	Averaged	
Trichloroethene	0.34521	0.32013	0.32013	0.200	7.26528	20.0	Averaged	
Bromodichloromethane	0.39063	0.37805	0.37805	0.200	3.22109	20.0	Averaged	
2-Chloroethylvinyl ether	++++	++++	1.016e+63	0.001	++++	20.0	Linear	*
1,2-Dichloropropane	0.32734	0.31179	0.31179	0.100	4.75104	20.0	Averaged	
Dibromomethane	0.21025	0.20787	0.20787	0.100	1.13268	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_443493

Volatiles by EPA 8260

Instrument ID VOA9.I
Lab File ID U080803.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :37
ICAL Date(s) 31-JUL-2023 31-JUL-2023
ICAL Times :30 15:13
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
4-Methyl-2-Pentanone	0.37203	0.35778	0.35778	0.100	3.83198	20.0	Averaged	
cis-1,3-Dichloropropene	50.0	47.07993	0.46756	0.200	5.84013	20.0	Linear	
48 Toluene-d8	1.16296	1.12023	1.12023	0.100	3.67407	20.0	Averaged	
Toluene	1.35940	1.27138	1.27138	0.400	6.47498	20.0	Averaged	
trans-1,3-Dichloropropene	0.37652	0.39137	0.39137	0.100	-3.94389	20.0	Averaged	
2-Hexanone	0.24635	0.23740	0.23740	0.100	3.63282	20.0	Averaged	
1,1,2-Trichloroethane	0.29115	0.26844	0.26844	0.100	7.80205	20.0	Averaged	
1,3-Dichloropropane	0.59725	0.56021	0.56021	0.100	6.20149	20.0	Averaged	
Dibromochloromethane	0.35731	0.35487	0.35487	0.100	0.68150	20.0	Averaged	
Tetrachloroethene	0.33050	0.28546	0.28546	0.200	13.62714	20.0	Averaged	
1,2-Dibromoethane	0.35025	0.34192	0.34192	0.100	2.37875	20.0	Averaged	
1-Chlorohexane	0.26109	0.19394	0.19394	0.100	25.72102	20.0	Averaged	*
Chlorobenzene	0.96367	0.89746	0.89746	0.500	6.87087	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.35123	0.32498	0.32498	0.100	7.47453	20.0	Averaged	
Ethylbenzene	0.43626	0.41239	0.41239	0.100	5.47258	20.0	Averaged	
m,p-Xylenes	0.51216	0.53047	0.53047	0.100	-3.57477	20.0	Averaged	
o-Xylene	0.50104	0.53621	0.53621	0.300	-7.01824	20.0	Averaged	
Styrene	0.78185	0.89867	0.89867	0.300	-14.94122	20.0	Averaged	
Bromoform	0.24962	0.25332	0.25332	0.100	-1.48189	20.0	Averaged	
Isopropylbenzene	1.21241	1.15712	1.15712	0.100	4.55991	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.96308	0.83063	0.83063	0.300	13.75236	20.0	Averaged	
1,2,3-Trichloropropane	0.83852	0.77284	0.77284	0.100	7.83288	20.0	Averaged	
n-Propylbenzene	50.0	40.40392	2.25529	0.100	19.19217	20.0	Linear	
Bromobenzene	0.82718	0.75852	0.75852	0.100	8.29955	20.0	Averaged	
1,3,5-Trimethylbenzene	1.74740	1.64750	1.64750	0.100	5.71687	20.0	Averaged	
2-Chlorotoluene	1.76276	1.55734	1.55734	0.100	11.65305	20.0	Averaged	
4-Chlorotoluene	1.96898	1.79971	1.79971	0.100	8.59664	20.0	Averaged	
tert-Butylbenzene	1.65544	1.42653	1.42653	0.100	13.82767	20.0	Averaged	
1,2,4-Trimethylbenzene	1.76950	1.72500	1.72500	0.100	2.51489	20.0	Averaged	
sec-Butylbenzene	50.0	47.45173	1.78470	0.100	5.09655	20.0	Quadratic	
p-Isopropyltoluene	50.0	51.44772	1.61475	0.100	-2.89544	20.0	Quadratic	
1,3-Dichlorobenzene	1.38058	1.22262	1.22262	0.600	11.44202	20.0	Averaged	
1,4-Dichlorobenzene	1.52990	1.30101	1.30101	0.400	14.96102	20.0	Averaged	
n-Butylbenzene	50.0	40.51739	1.34948	0.500	18.96523	20.0	Linear	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_443493

Volatiles by EPA 8260

Instrument ID VOA9.I
Lab File ID U080803.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :37
ICAL Date(s) 31-JUL-2023 31-JUL-2023
ICAL Times :30 15:13
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichlorobenzene	1.41649	1.25280	1.25280	0.400	11.55575	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	0.13885	0.13031	0.13031	0.050	6.15303	20.0	Averaged	
1,2,4-Trichlorobenzene	0.87137	0.83481	0.83481	0.200	4.19632	20.0	Averaged	
Hexachlorobutadiene	50.0	52.95588	0.33936	0.100	-5.91175	20.0	Quadratic	
Naphthalene	50.0	46.22140	2.12174	0.200	7.55720	20.0	Linear	
1,2,3-Trichlorobenzene	0.88960	0.82315	0.82315	0.100	7.46975	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.39061	0.38143	0.38143	0.200	2.35151	20.0	Averaged	
95 Xylenes (total)	0.47784	0.51118	0.51118	0.100	-6.97674	20.0	Averaged	
1,4-Dioxane	0.00717	0.00631	0.00631	0.001	11.91548	20.0	Averaged	
Cyclohexane	0.56197	0.41295	0.41295	0.100	26.51834	20.0	Averaged	*
Freon TF	50.0	47.50235	0.25335	0.100	4.99530	20.0	Quadratic	
1,3-Butadiene	0.39812	0.34951	0.34951	0.100	12.21066	20.0	Averaged	
Methylcyclohexane	0.72828	0.72632	0.72632	0.100	0.26841	20.0	Averaged	
Methyl Acetate	0.35877	0.34898	0.34898	0.100	2.73016	20.0	Averaged	
Tert-butyl alcohol	1000	1024	0.04306	0.005	-2.44369	20.0	Linear	
Isopropyl alcohol	0.02763	0.02608	0.02608	0.005	5.60919	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.06761	0.07218	0.07218	0.050	-6.75634	20.0	Averaged	
Isobutyl Alcohol	0.07082	0.07260	0.07260	0.005	-2.52274	20.0	Averaged	
Acetonitrile	0.04619	0.04689	0.04689	0.005	-1.51209	20.0	Averaged	
Allyl Chloride	1.05495	1.03765	1.03765	0.100	1.63973	20.0	Averaged	
Methacrylonitrile	0.28080	0.27631	0.27631	0.100	1.59711	20.0	Averaged	
Methyl Methacrylate	0.43202	0.44712	0.44712	0.100	-3.49433	20.0	Averaged	
Propionitrile	0.05936	0.06157	0.06157	0.010	-3.72157	20.0	Averaged	
Methyl Acrylate	0.47833	0.48686	0.48686	0.100	-1.78305	20.0	Averaged	
Epichlorohydrin	200	261	0.00401	0.001	-30.46867	20.0	Quadratic	*

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_443493

Volatiles by EPA 8260

Instrument ID VOA9.I
Lab File ID U080816.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :38
ICAL Date(s) 31-JUL-2023 31-JUL-2023
ICAL Times :30 15:13
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	39.87590	0.37920	0.100	20.24820	50.0	Linear	
Chloromethane	50.0	35.45056	0.41723	0.100	29.09889	50.0	Linear	
Vinyl Chloride	0.49229	0.39701	0.39701	0.100	19.35432	50.0	Averaged	
Bromomethane	50.0	38.63462	0.20700	0.100	22.73076	50.0	Linear	
Chloroethane	0.31000	0.24623	0.24623	0.100	20.57082	50.0	Averaged	
Trichlorofluoromethane	0.60759	0.53990	0.53990	0.100	11.14151	50.0	Averaged	
Acrolein	0.03207	0.02277	0.02277	0.010	29.00250	50.0	Averaged	
Acetone	100	95.45663	0.14990	0.100	4.54337	50.0	Linear	
1,1-Dichloroethene	0.32942	0.29274	0.29274	0.100	11.13664	50.0	Averaged	
Iodomethane	100	112	0.36210	0.100	-12.38903	50.0	Quadratic	
Acrylonitrile	0.15717	0.14967	0.14967	0.050	4.76633	50.0	Averaged	
Methylene Chloride	50.0	45.36919	0.36325	0.100	9.26162	50.0	Linear	
Methyl tert-butyl ether	1.01819	1.01252	1.01252	0.100	0.55685	50.0	Averaged	
Carbon Disulfide	0.95901	0.86086	0.86086	0.100	10.23412	50.0	Averaged	
trans-1,2-Dichloroethene	0.36916	0.32614	0.32614	0.100	11.65200	50.0	Averaged	
Vinyl Acetate	1.05648	1.01659	1.01659	0.010	3.77587	50.0	Averaged	
1,1-Dichloroethane	0.67475	0.58439	0.58439	0.200	13.39162	50.0	Averaged	
2-Butanone	0.19643	0.17013	0.17013	0.100	13.38727	50.0	Averaged	
2,2-Dichloropropane	0.46523	0.43756	0.43756	0.100	5.94777	50.0	Averaged	
cis-1,2-Dichloroethene	0.41207	0.39010	0.39010	0.100	5.33166	50.0	Averaged	
Chloroform	0.78523	0.70567	0.70567	0.200	10.13193	50.0	Averaged	
Bromochloromethane	0.24383	0.21596	0.21596	0.100	11.43161	50.0	Averaged	
30 Dibromofluoromethane	50.0	52.48457	0.41938	0.100	-4.96914	50.0	Linear	
1,1,1-Trichloroethane	0.61090	0.54980	0.54980	0.100	10.00102	50.0	Averaged	
1,1-Dichloropropene	0.37127	0.32468	0.32468	0.100	12.55067	50.0	Averaged	
1,2-Dichloroethane	0.43057	0.41772	0.41772	0.100	2.98584	50.0	Averaged	
Carbon Tetrachloride	0.33260	0.28242	0.28242	0.100	15.08788	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	53.84344	0.46813	0.100	-7.68689	50.0	Linear	
Benzene	1.22138	1.08232	1.08232	0.500	11.38554	50.0	Averaged	
Trichloroethene	0.34521	0.30798	0.30798	0.200	10.78402	50.0	Averaged	
Bromodichloromethane	0.39063	0.36684	0.36684	0.200	6.09212	50.0	Averaged	
2-Chloroethylvinyl ether	++++	++++	1.016e+63	0.001	++++	50.0	Linear	*
1,2-Dichloropropane	0.32734	0.29480	0.29480	0.100	9.94154	50.0	Averaged	
Dibromomethane	0.21025	0.19682	0.19682	0.100	6.39042	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_443493

Volatiles by EPA 8260

Instrument ID VOA9.I
Lab File ID U080816.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :38
ICAL Date(s) 31-JUL-2023 31-JUL-2023
ICAL Times :30 15:13
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
4-Methyl-2-Pentanone	0.37203	0.34950	0.34950	0.100	6.05651	50.0	Averaged	
cis-1,3-Dichloropropene	50.0	43.58143	0.43111	0.200	12.83713	50.0	Linear	
48 Toluene-d8	1.16296	1.14350	1.14350	0.100	1.67378	50.0	Averaged	
Toluene	1.35940	1.20982	1.20982	0.400	11.00332	50.0	Averaged	
trans-1,3-Dichloropropene	0.37652	0.36755	0.36755	0.100	2.38316	50.0	Averaged	
2-Hexanone	0.24635	0.23548	0.23548	0.100	4.41218	50.0	Averaged	
1,1,2-Trichloroethane	0.29115	0.25205	0.25205	0.100	13.43083	50.0	Averaged	
1,3-Dichloropropane	0.59725	0.53219	0.53219	0.100	10.89324	50.0	Averaged	
Dibromochloromethane	0.35731	0.33492	0.33492	0.100	6.26726	50.0	Averaged	
Tetrachloroethene	0.33050	0.27607	0.27607	0.200	16.46922	50.0	Averaged	
1,2-Dibromoethane	0.35025	0.32883	0.32883	0.100	6.11717	50.0	Averaged	
1-Chlorohexane	0.26109	0.21753	0.21753	0.100	16.68580	50.0	Averaged	
Chlorobenzene	0.96367	0.86439	0.86439	0.500	10.30229	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.35123	0.31549	0.31549	0.100	10.17649	50.0	Averaged	
Ethylbenzene	0.43626	0.40363	0.40363	0.100	7.47961	50.0	Averaged	
m,p-Xylenes	0.51216	0.52280	0.52280	0.100	-2.07705	50.0	Averaged	
o-Xylene	0.50104	0.51884	0.51884	0.300	-3.55099	50.0	Averaged	
Styrene	0.78185	0.85936	0.85936	0.300	-9.91423	50.0	Averaged	
Bromoform	0.24962	0.23867	0.23867	0.100	4.38653	50.0	Averaged	
Isopropylbenzene	1.21241	1.20188	1.20188	0.100	0.86809	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.96308	0.77231	0.77231	0.300	19.80788	50.0	Averaged	
1,2,3-Trichloropropane	0.83852	0.73810	0.73810	0.100	11.97607	50.0	Averaged	
n-Propylbenzene	50.0	42.02258	2.34946	0.100	15.95484	50.0	Linear	
Bromobenzene	0.82718	0.72174	0.72174	0.100	12.74631	50.0	Averaged	
1,3,5-Trimethylbenzene	1.74740	1.71465	1.71465	0.100	1.87425	50.0	Averaged	
2-Chlorotoluene	1.76276	1.58295	1.58295	0.100	10.20016	50.0	Averaged	
4-Chlorotoluene	1.96898	1.82506	1.82506	0.100	7.30946	50.0	Averaged	
tert-Butylbenzene	1.65544	1.51859	1.51859	0.100	8.26649	50.0	Averaged	
1,2,4-Trimethylbenzene	1.76950	1.81013	1.81013	0.100	-2.29613	50.0	Averaged	
sec-Butylbenzene	50.0	50.20188	1.90581	0.100	-0.40377	50.0	Quadratic	
p-Isopropyltoluene	50.0	54.81075	1.74175	0.100	-9.62150	50.0	Quadratic	
1,3-Dichlorobenzene	1.38058	1.22507	1.22507	0.600	11.26414	50.0	Averaged	
1,4-Dichlorobenzene	1.52990	1.29578	1.29578	0.400	15.30337	50.0	Averaged	
n-Butylbenzene	50.0	42.54720	1.42132	0.500	14.90560	50.0	Linear	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID VOA9_443493

Volatiles by EPA 8260

Instrument ID VOA9.I
Lab File ID U080816.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :38
ICAL Date(s) 31-JUL-2023 31-JUL-2023
ICAL Times :30 15:13
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichlorobenzene	1.41649	1.25513	1.25513	0.400	11.39153	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	0.13885	0.12224	0.12224	0.050	11.96381	50.0	Averaged	
1,2,4-Trichlorobenzene	0.87137	0.84791	0.84791	0.200	2.69204	50.0	Averaged	
Hexachlorobutadiene	50.0	49.66624	0.31467	0.100	0.66752	50.0	Quadratic	
Naphthalene	50.0	46.72425	2.14564	0.200	6.55150	50.0	Linear	
1,2,3-Trichlorobenzene	0.88960	0.84862	0.84862	0.100	4.60653	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.39061	0.35812	0.35812	0.200	8.31824	50.0	Averaged	
95 Xylenes (total)	0.47784	0.50398	0.50398	0.100	-5.47113	50.0	Averaged	
1,4-Dioxane	0.00717	0.00618	0.00618	0.001	13.80898	50.0	Averaged	
Cyclohexane	0.56197	0.43958	0.43958	0.100	21.78004	50.0	Averaged	
Freon TF	50.0	47.49868	0.25333	0.100	5.00265	50.0	Quadratic	
1,3-Butadiene	0.39812	0.33074	0.33074	0.100	16.92406	50.0	Averaged	
Methylcyclohexane	0.72828	0.63813	0.63813	0.100	12.37820	50.0	Averaged	
Methyl Acetate	0.35877	0.32779	0.32779	0.100	8.63698	50.0	Averaged	
Tert-butyl alcohol	1000	1021	0.04291	0.005	-2.08580	50.0	Linear	
Isopropyl alcohol	0.02763	0.02598	0.02598	0.005	5.97843	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.06761	0.07776	0.07776	0.050	-15.01502	50.0	Averaged	
Isobutyl Alcohol	0.07082	0.06780	0.06780	0.005	4.26741	50.0	Averaged	
Acetonitrile	0.04619	0.04309	0.04309	0.005	6.70129	50.0	Averaged	
Allyl Chloride	1.05495	0.93323	0.93323	0.100	11.53831	50.0	Averaged	
Methacrylonitrile	0.28080	0.25264	0.25264	0.100	10.02804	50.0	Averaged	
Methyl Methacrylate	0.43202	0.40770	0.40770	0.100	5.62854	50.0	Averaged	
Propionitrile	0.05936	0.05665	0.05665	0.010	4.55698	50.0	Averaged	
Methyl Acrylate	0.47833	0.46110	0.46110	0.100	3.60225	50.0	Averaged	
Epichlorohydrin	200	291	0.00466	0.001	-45.65137	50.0	Quadratic	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

www.alsglobal.com

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Volatiles by EPA 8260

VOA9_443493		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U080803.D	407824	#	4.81	#	589261	#	5.55	#	565790	#	8.19	#	325510	#	10.17	#
HS23080101-01	U080811.D	407242		4.82		546286		5.55		538112		8.19		290940		10.17	
HS23080101-01MS	U080814.D	405384		4.82		545222		5.55		508088		8.19		304006		10.17	
HS23080101-01MSD	U080815.D	463959		4.81		622950		5.55		589270		8.19		341696		10.17	
HS23080101-03	U080808.D	435759		4.82		600572		5.55		559190		8.19		297260		10.17	
VBLKW-230808	U080807.D	431269		4.81		625112		5.55		566691		8.19		306722		10.17	
VLCSW-230808	U080805.D	430680		4.82		606353		5.55		572160		8.19		325675		10.17	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles by EPA 8260

Workorder

HS23080101

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Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID VOA9-442900

Volatiles by EPA 8260

Run ID VOA9_442900 **Start Date** 07/31/23 **EndDate** 07/31/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:08	BFB	TUNE	BFB	U073101.D	07/31/23	1
11:30	VSTD000.25	ICAL1	VSTD000.25	U073102.D	07/31/23	1
11:53	VSTD000.5	ICAL2	VSTD000.5	U073103.D	07/31/23	1
12:37	VSTD001	ICAL3	VSTD001	U073104.D	07/31/23	1
12:59	VSTD002	ICAL4	VSTD002	U073105.D	07/31/23	1
13:22	VSTD005	ICAL5	VSTD005	U073106.D	07/31/23	1
13:44	VSTD020	ICAL6	VSTD020	U073107.D	07/31/23	1
14:06	VSTD050	ICAL7	VSTD050	U073108.D	07/31/23	1
14:28	VSTD100	ICAL8	VSTD100	U073109.D	07/31/23	1
14:51	VSTD150	ICAL9	VSTD150	U073110.D	07/31/23	1
15:13	VSTD200	ICAL	VSTD200	U073111.D	07/31/23	1
15:57	CCV	ICV	CCV	U073113.D	07/31/23	1

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID VOA9-443493

Volatiles by EPA 8260

Run ID VOA9_443493 **Start Date** 08/08/23 **EndDate** 08/08/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
10:53	BFB	TUNE	BFB	U080801.D	08/08/23	1
11:37	CCV	CCV	CCV	U080803.D	08/08/23	1
12:00	CCB	CCB	CCB	U080804.D	08/08/23	1
12:22	VLCSW-230808	LCS	VLCSW-230808	U080805.D	08/08/23	1
13:17	VBLKW-230808	MBLK	VBLKW-230808	U080807.D	08/08/23	1
13:39	HS23080101-03	SAMP	Trip Blank	U080808.D	08/08/23	1
14:01	HS23080324-02	SAMP	ZZZZZZZZZZ	U080809.D	08/08/23	1
14:24	HS23080325-10	SAMP	ZZZZZZZZZZ	U080810.D	08/08/23	1
14:46	HS23080101-01	SAMP	LH18/24-	U080811.D	08/08/23	1
15:08	HS23080325-01	SAMP	ZZZZZZZZZZ	U080812.D	08/08/23	1
15:31	HS23080324-01	SAMP	ZZZZZZZZZZ	U080813.D	08/08/23	1
15:53	HS23080101-01MS	MS	HS23080101-01MS	U080814.D	08/08/23	1
16:16	HS23080101-01MSD	MSD	HS23080101-01MSD	U080815.D	08/08/23	1
16:38	CCV-END	CCV_END	CCV-END	U080816.D	08/08/23	1

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Raw Data VOA9 442900

Volatiles by EPA 8260

Workorder

HS23080101

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08/10/2023

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Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073101.D Page 1
Report Date: 31-Jul-2023 11:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 31-JUL-2023 11:08
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	18893			0.00- 100.00	92.72
9.194	9.180	(0.000)	50	3365			15.00- 40.00	17.81
9.194	9.180	(0.000)	75	8705			30.00- 60.00	46.08
9.194	9.180	(0.000)	96	1333			5.00- 9.00	7.06
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	20377			50.00- 0.00	107.85
9.194	9.180	(0.000)	175	1810			5.00- 9.00	8.88
9.194	9.180	(0.000)	176	19363			95.00- 101.00	95.02
9.194	9.180	(0.000)	177	1200			5.00- 9.00	6.20

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.81
75	30.00 - 60.00% of mass 95	46.08
96	5.00 - 9.00% of mass 95	7.06
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	107.85
175	5.00 - 9.00% of mass 174	9.58 (8.88)
176	95.00 - 101.00% of mass 174	102.49 (95.02)
177	5.00 - 9.00% of mass 176	6.35 (6.20)

Data File: U073101.D
Spectrum: Average Spectrum: 9.209 to 9.224 min.
Location of Maximum: 174.00
Number of points: 167

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	27	77.00	277	125.00	23	175.00	1810
36.00	407	78.00	96	126.00	59	176.00	19360
37.00	1048	79.00	726	127.00	109	177.00	1200
38.00	948	80.00	297	128.00	104	178.00	109
39.00	593	81.00	653	129.00	49	180.00	10
40.00	558	82.00	297	130.00	66	181.00	34
41.00	374	83.00	139	131.00	111	184.00	11
42.00	203	84.00	153	132.00	11	185.00	15
43.00	221	86.00	121	133.00	10	187.00	48
44.00	655	87.00	968	134.00	37	188.00	22
45.00	249	88.00	1129	135.00	106	192.00	25
46.00	218	89.00	25	136.00	49	197.00	14
47.00	365	90.00	76	137.00	51	201.00	33
48.00	194	91.00	135	138.00	51	203.00	11
49.00	831	92.00	647	139.00	42	205.00	73
50.00	3365	93.00	911	140.00	14	206.00	10
51.00	1304	94.00	2311	141.00	329	207.00	29
52.00	166	95.00	18888	142.00	94	208.00	38
53.00	213	96.00	1333	143.00	328	209.00	25
54.00	153	97.00	111	144.00	29	214.00	22
55.00	238	98.00	90	145.00	105	215.00	15
56.00	339	99.00	115	146.00	56	216.00	35
57.00	551	100.00	24	147.00	104	219.00	78
58.00	126	102.00	159	148.00	48	227.00	10
59.00	113	103.00	14	149.00	75	229.00	49
60.00	282	104.00	160	150.00	106	230.00	43
61.00	885	105.00	61	152.00	22	232.00	10
62.00	951	106.00	137	153.00	48	236.00	26
63.00	815	107.00	71	155.00	138	237.00	10
64.00	206	108.00	110	156.00	33	238.00	64
65.00	371	109.00	48	157.00	71	239.00	26
66.00	134	110.00	134	158.00	23	240.00	38
67.00	96	111.00	58	159.00	100	243.00	22
68.00	1753	112.00	203	160.00	10	258.00	23
69.00	1825	114.00	119	161.00	48	263.00	41
70.00	227	116.00	200	162.00	29	267.00	12
71.00	82	117.00	256	163.00	28	298.00	21
72.00	151	118.00	96	167.00	11	308.00	11
73.00	783	119.00	230	170.00	58	316.00	11
74.00	3014	121.00	59	171.00	98	327.00	21
75.00	8705	123.00	85	172.00	638	345.00	43
76.00	822	124.00	25	174.00	20376		

Data File: \\nahstws005\target\chem\voa9.i\u230731.b\u073101.d Page 1

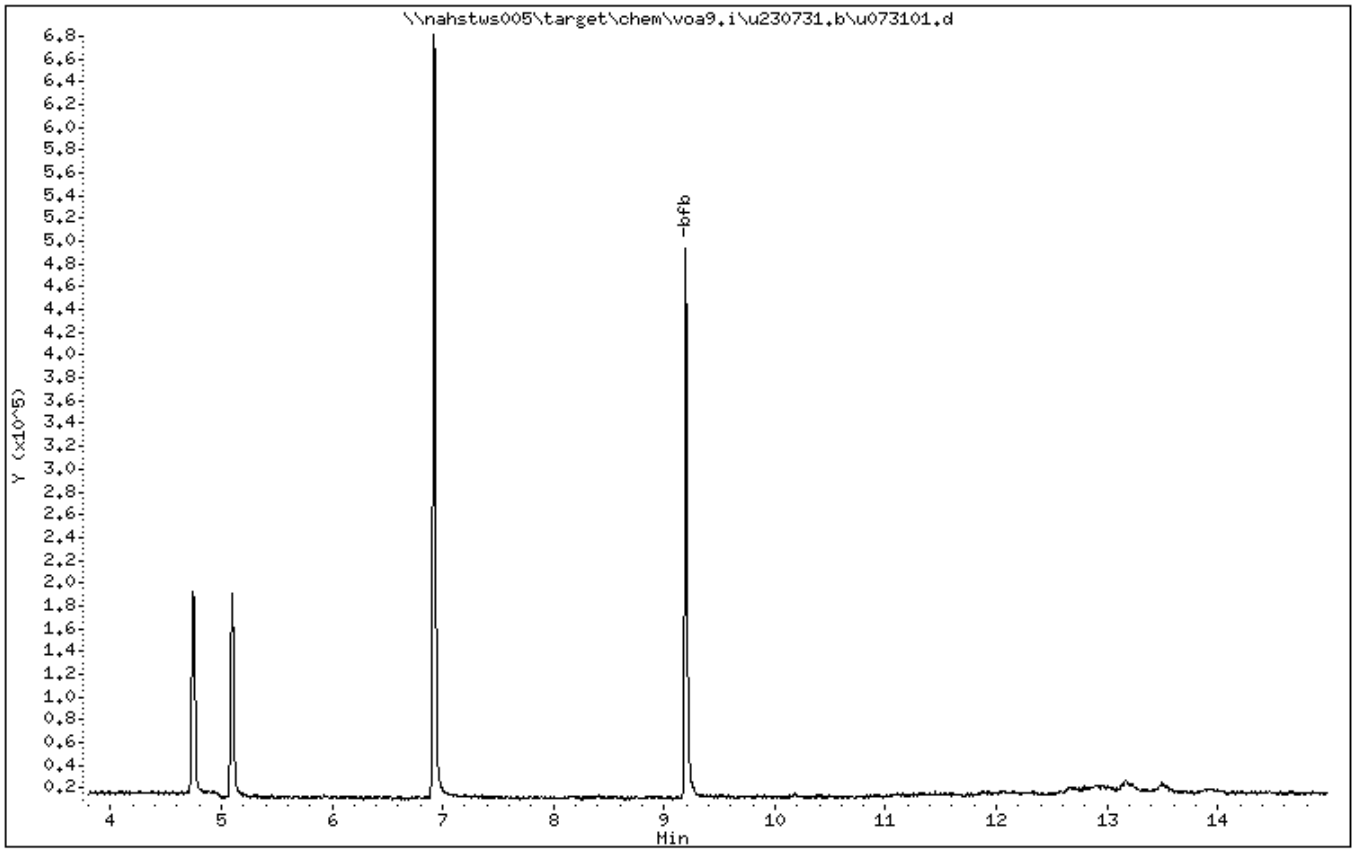
Date : 31-JUL-2023 11:08

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073101.d
Inj Date : 31-JUL-2023 11:08
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073102.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073102.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 31-JUL-2023 11:30
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.811	4.811	(1.000)	496916	50.0000	
	2 Dichlorodifluoromethane	85	1.160	1.160	(0.241)	978	0.25000	1.45
	3 Chloromethane	50	1.291	1.291	(0.268)	2678	0.25000	0.11
	5 Vinyl Chloride	62	1.374	1.374	(0.286)	1552	0.25000	0.31
	6 Bromomethane	94	1.621	1.621	(0.337)	1788	0.25000	
	7 Chloroethane	64	1.693	1.693	(0.352)	1133	0.25000	0.36
	8 Trichlorofluoromethane	101	1.888	1.888	(0.392)	1401	0.25000	0.23
	9 Acrolein	56	1.816	1.816	(0.378)	882	0.50000	2.76
	10 Acetone	43	2.405	2.405	(0.500)	5678	0.50000	
	11 1,1-Dichloroethene	96	2.330	2.330	(0.484)	756	0.25000	0.23
	15 Iodomethane	142	2.457	2.457	(0.511)	1651	0.50000	3.94(T)
	16 Acrylonitrile	53	3.065	3.065	(0.637)	1221	0.50000	0.78
	17 Methylene Chloride	84	2.791	2.791	(0.580)	4067	0.25000	0.83
	18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	2887	0.25000	0.28
	20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	1110	0.25000	0.30(T)
	27 cis-1,2-Dichloroethene	96	4.185	4.185	(0.870)	1135	0.25000	0.27
	28 Chloroform	83	4.568	4.568	(0.949)	2583	0.25000	0.33
	29 Bromochloromethane	128	4.459	4.459	(0.927)	932	0.25000	0.38
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	1672	0.25000	
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	1600	0.25000	0.26

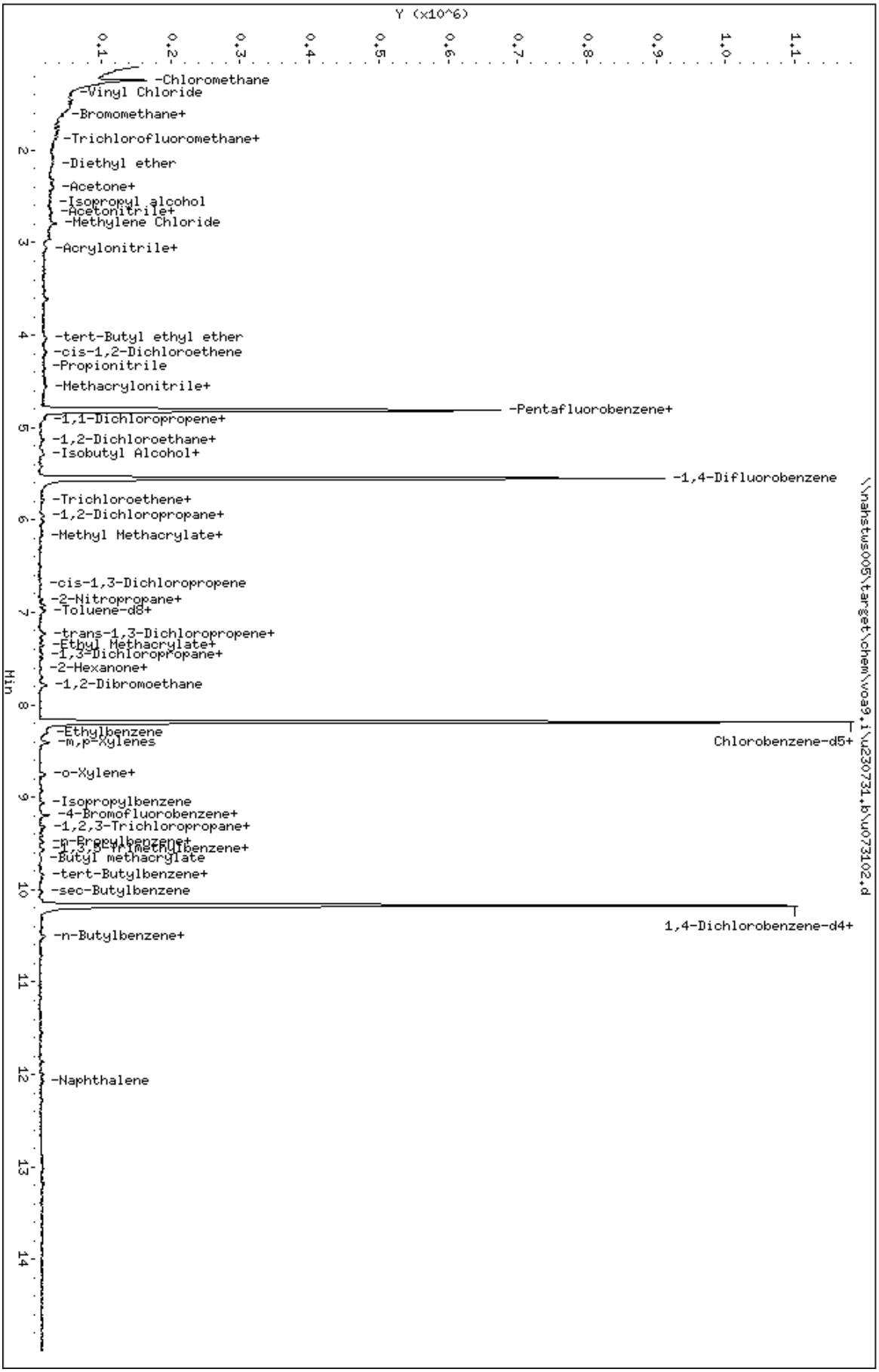
32 1,1-Dichloropropene	75	4.913	4.913 (0.885)	1314	0.25000	0.24
33 1,2-Dichloroethane	62	5.175	5.175 (0.932)	2443	0.25000	0.40

Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073102.D Page 2
Report Date: 07-Aug-2023 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	34 Carbon Tetrachloride	117	4.901	4.901	(0.883)	1067	0.25000	0.22
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.060)	1633	0.25000	(T)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	707855	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	5117	0.25000	0.29
	38 Trichloroethene	130	5.786	5.786	(1.043)	1555	0.25000	0.31
	42 1,2-Dichloropropane	63	6.011	6.011	(1.083)	1647	0.25000	0.35
	44 Dibromomethane	93	6.120	6.120	(1.103)	983	0.25000	0.33
	45 4-Methyl-2-Pentanone	43	6.862	6.862	(0.838)	2668	0.50000	0.55
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.206)	1425	0.25000	2.39
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	641569	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	5646	0.25000	0.37
	50 Toluene	91	6.978	6.978	(0.853)	4604	0.25000	0.26
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.298)	1070	0.25000	0.20
	52 2-Hexanone	43	7.604	7.604	(0.929)	1668	0.50000	0.52
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	1284	0.25000	0.34
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	2426	0.25000	0.31
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	1272	0.25000	0.27
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	1159	0.25000	0.27
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	1274	0.25000	0.28
	58 1-Chlorohexane	55	8.185	8.185	(1.475)	6173	0.25000	1.67
	59 Chlorobenzene	112	8.212	8.212	(1.003)	3729	0.25000	0.30
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	1356	0.25000	0.30
	61 Ethylbenzene	106	8.305	8.305	(1.015)	1736	0.25000	0.31
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	3937	0.50000	0.59
	63 o-Xylene	106	8.748	8.748	(1.069)	1597	0.25000	0.24
	64 Styrene	104	8.766	8.766	(1.071)	2398	0.25000	0.23
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	3195	0.25000	0.20
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	4338	0.25000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	303700	50.0000	
	71 1,2,3-Trichloropropane	75	9.366	9.366	(0.921)	1619	0.25000	0.31
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	3466	0.25000	1.83
	74 Bromobenzene	156	9.325	9.325	(0.917)	1662	0.25000	0.33
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	2570	0.25000	0.24
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	2465	0.25000	0.23
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	2129	0.25000	0.17
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	2549	0.25000	0.25
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2409	0.25000	0.22
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	2455	0.25000	
	82 p-Isopropyltoluene	119	10.150	10.150	(0.998)	2272	0.25000	
	83 1,3-Dichlorobenzene	146	10.120	10.120	(0.995)	2413	0.25000	0.28
	84 1,4-Dichlorobenzene	146	10.187	10.187	(1.001)	3376	0.25000	0.36
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	1965	0.25000	2.57
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	2767	0.25000	0.32
	92 Naphthalene	128	12.073	12.073	(1.187)	3872	0.25000	1.85
M	94 1,2-Dichloroethylene (total)	96				2245	0.50000	
M	95 Xylenes (total)	106				5534	0.75000	
	135 1,4-Dioxane	88	6.176	6.176	(1.284)	401	5.00000	5.62(M)
	141 Cyclohexane	56	4.811	4.811	(1.000)	8671	0.25000	1.55
	138 Freon TF	101	2.322	2.322	(0.483)	707	0.25000	
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	2978	0.25000	0.28

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\voa9,i\u230731,b\u073102,d
Date : 31-JUL-2023 11:30
Client ID: VSTD000.25
Sample Info: VSTD000,25;VSTD000,25;1;1;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

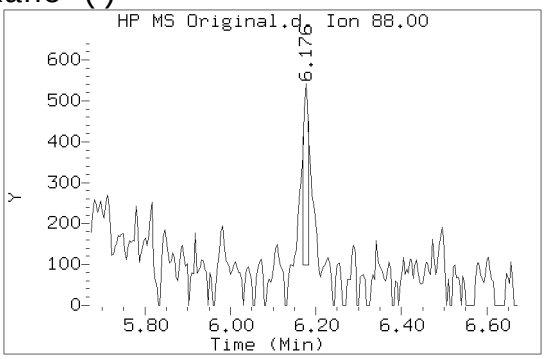
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Inj Date : 31-JUL-2023 11:30
InstruID : VOA9.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

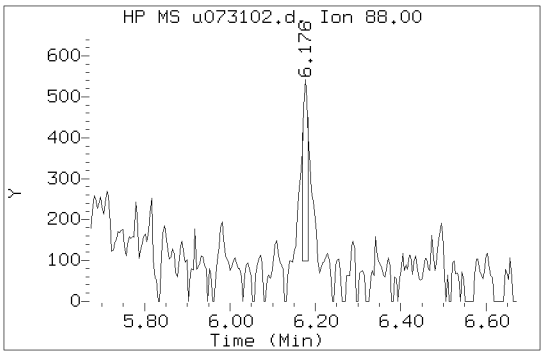
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88
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401
HEIGHT
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01-Aug-2023
20:56



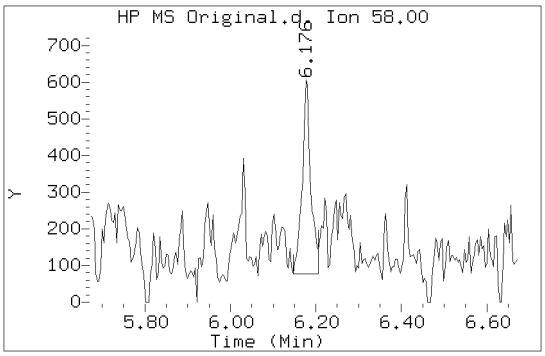
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AREA
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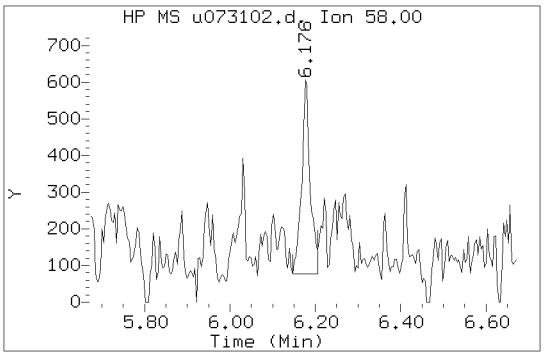
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529
01-Aug-2023
20:56



AFTER

MASS
58
AREA
763
HEIGHT
529
01-Aug-2023
20:56



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073103.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073103.D
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Inj Date : 31-JUL-2023 11:53
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V9;WATER;0;1;
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Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 11:30 Cal File: U073102.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	469659	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	2205	0.50000	1.73(M)
3	Chloromethane	50	1.295	1.295	(0.269)	3690	0.50000	0.32(M)
5	Vinyl Chloride	62	1.374	1.374	(0.285)	2466	0.50000	0.53(M)
6	Bromomethane	94	1.618	1.618	(0.336)	1966	0.50000	(M)
7	Chloroethane	64	1.696	1.696	(0.352)	1758	0.50000	0.60(M)
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	3036	0.50000	0.53
9	Acrolein	56	1.741	1.741	(0.362)	302	1.00000	1.00(M)
10	Acetone	43	2.412	2.412	(0.501)	6516	1.00000	
11	1,1-Dichloroethene	96	2.334	2.334	(0.485)	1618	0.50000	0.52(M)
15	Iodomethane	142	2.465	2.465	(0.512)	3031	1.00000	4.45
16	Acrylonitrile	53	3.068	3.068	(0.637)	1466	1.00000	0.99
17	Methylene Chloride	84	2.795	2.795	(0.580)	2838	0.50000	0.56(M)
18	Methyl tert-butyl ether	73	3.080	3.080	(0.640)	5238	0.50000	0.54
19	Carbon Disulfide	76	2.517	2.517	(0.523)	10100	1.00000	1.12
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.634)	2038	0.50000	0.58(M)
21	Vinyl Acetate	43	3.612	3.612	(0.750)	10832	1.00000	1.09(M)
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	3735	0.50000	0.58(M)
24	2-Butanone	43	4.272	4.272	(0.887)	2140	1.00000	1.15(M)
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	2117	0.50000	0.48

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	2083	0.50000	0.53
28 Chloroform	83	4.572	4.572 (0.949)	4366	0.50000	0.59

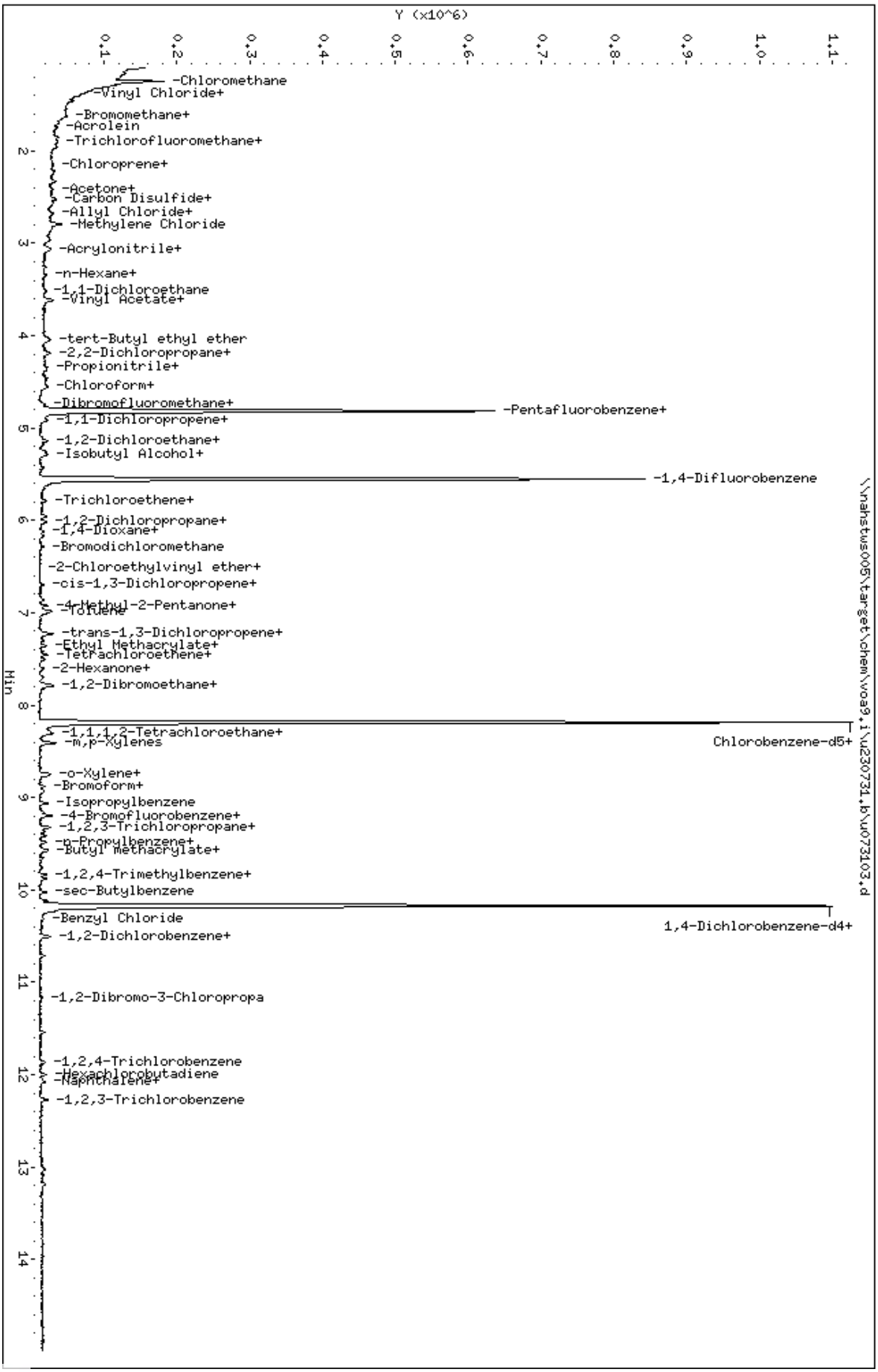
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.459	4.459	(0.926)	1195	0.50000	0.52(M)
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	2118	0.50000	
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	3083	0.50000	0.53
	32 1,1-Dichloropropene	75	4.916	4.916	(0.885)	2695	0.50000	0.54(M)
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	3164	0.50000	0.55
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	2525	0.50000	0.57(M)
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	2440	0.50000	(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	661682	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	9106	0.50000	0.56
	38 Trichloroethene	130	5.786	5.786	(1.042)	2624	0.50000	0.57
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	2588	0.50000	0.50(M)
	41 2-Chloroethylvinyl ether	63	6.585	6.585	(1.186)	114	1.00000	0.44(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	2595	0.50000	0.59
	44 Dibromomethane	93	6.120	6.120	(1.102)	1420	0.50000	0.51(M)
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	4822	1.00000	1.04
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	3082	0.50000	2.64
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	618112	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	8612	0.50000	0.59(M)
	50 Toluene	91	6.982	6.982	(0.853)	9602	0.50000	0.57
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.297)	2626	0.50000	0.52(M)
	52 2-Hexanone	43	7.600	7.600	(0.929)	3055	1.00000	1.00
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	2027	0.50000	0.56(M)
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	4407	0.50000	0.59(M)
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	2473	0.50000	0.55(M)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	2244	0.50000	0.54
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	2440	0.50000	0.56(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	1840	0.50000	0.53(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	6853	0.50000	0.57(M)
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	2648	0.50000	0.60
	61 Ethylbenzene	106	8.309	8.309	(1.015)	3091	0.50000	0.57
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	6440	1.00000	1.01
	63 o-Xylene	106	8.744	8.744	(1.068)	3233	0.50000	0.52
	64 Styrene	104	8.763	8.763	(1.071)	4750	0.50000	0.49(M)
	66 Bromoform	173	8.920	8.920	(1.090)	1569	0.50000	0.50(M)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	7003	0.50000	0.46(M)
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	3564	0.50000	0.60(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	5057	0.50000	(M)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	308084	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	2643	0.50000	0.51
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	7058	0.50000	2.03
	74 Bromobenzene	156	9.321	9.321	(0.916)	2743	0.50000	0.53
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	5406	0.50000	0.50(M)
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	5806	0.50000	0.53(M)
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	6267	0.50000	0.51(M)
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	5184	0.50000	0.50(M)
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	5024	0.50000	0.46
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	5696	0.50000	(M)
	82 p-Isopropyltoluene	119	10.150	10.150	(0.998)	5403	0.50000	(M)
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	4945	0.50000	0.58
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	5577	0.50000	0.59(M)
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	4114	0.50000	2.76(M)
	88 1,2-Dichlorobenzene	146	10.509	10.509	(1.033)	4844	0.50000	0.55

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	447	0.50000	0.52(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	2709	0.50000	0.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	1126	0.50000	(M)
	92 Naphthalene	128	12.073	12.073	(1.187)	6182	0.50000	2.01
	93 1,2,3-Trichlorobenzene	180	12.275	12.275	(1.207)	3219	0.50000	0.58(M)
M	94 1,2-Dichloroethylene (total)	96				4121	1.00000	
M	95 Xylenes (total)	106				9673	1.50000	
	135 1,4-Dioxane	88	6.176	6.176	(1.283)	808	10.0000	11.99(M)
	141 Cyclohexane	56	4.793	4.793	(0.995)	2383	0.50000	0.45(M)
	138 Freon TF	101	2.334	2.334	(0.485)	1250	0.50000	(M)
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	1979	0.50000	0.52(M)
	147 Methylcyclohexane	55	5.955	5.955	(1.072)	4995	0.50000	0.51(M)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	1992	0.50000	0.59(M)

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: VSTD000.5;VSTD000.5;1;2;
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Column phase: DB624

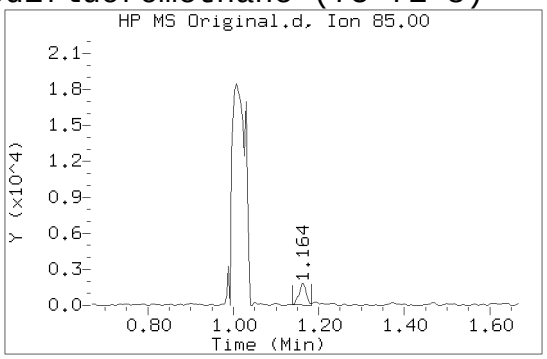
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Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

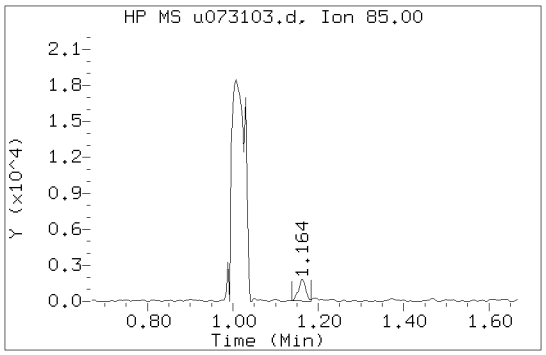
Dichlorodifluoromethane (75-71-8)

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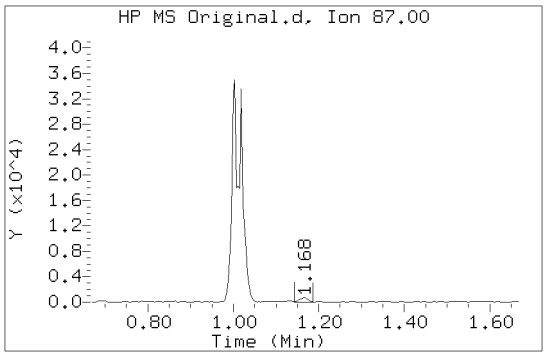
BEFORE
MASS
85
AREA
2205
HEIGHT
1801
01-Aug-2023
21:03



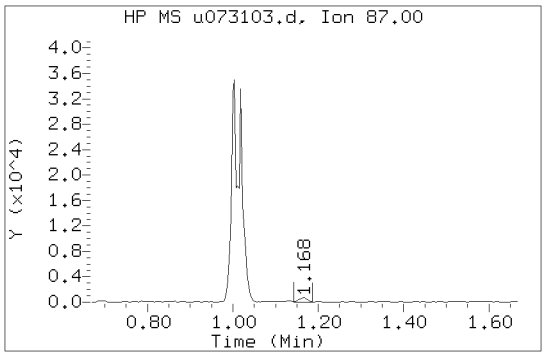
AFTER
MASS
85
AREA
2205
HEIGHT
1801
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
1017
HEIGHT
677
01-Aug-2023
21:03



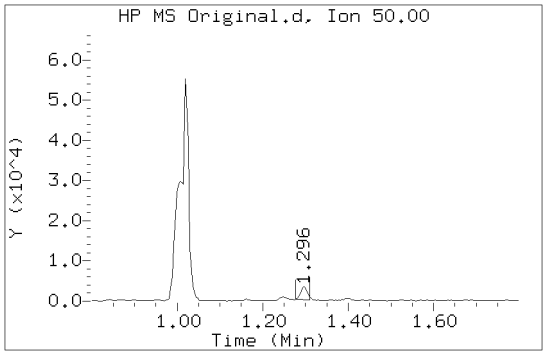
AFTER
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AREA
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HEIGHT
677
01-Aug-2023
21:03



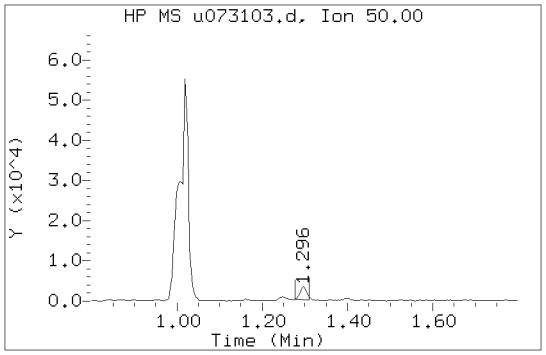
Chloromethane (74-87-3)

Reason Code:

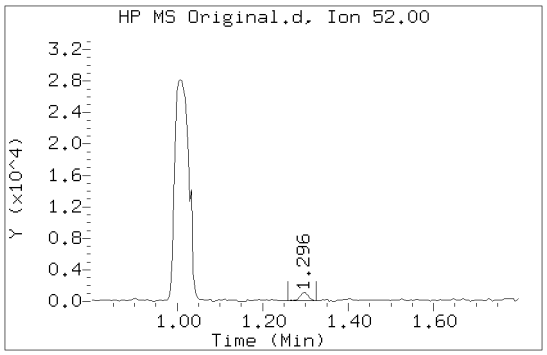
BEFORE
MASS
50
AREA
3690
HEIGHT
3256
01-Aug-2023
21:03



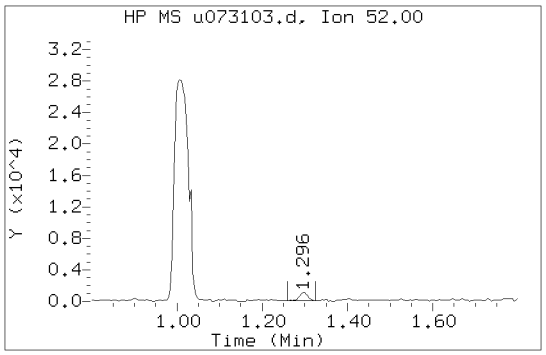
AFTER
MASS
50
AREA
3690
HEIGHT
3256
01-Aug-2023
21:03



BEFORE
MASS
52
AREA
1545
HEIGHT
1076
01-Aug-2023
21:03



AFTER
MASS
52
AREA
1545
HEIGHT
1076
01-Aug-2023
21:03



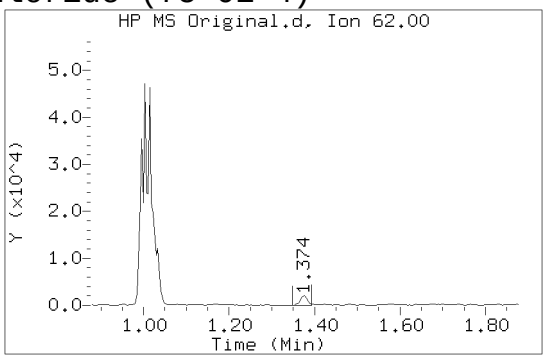
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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Vinyl Chloride (75-01-4)

Reason Code:

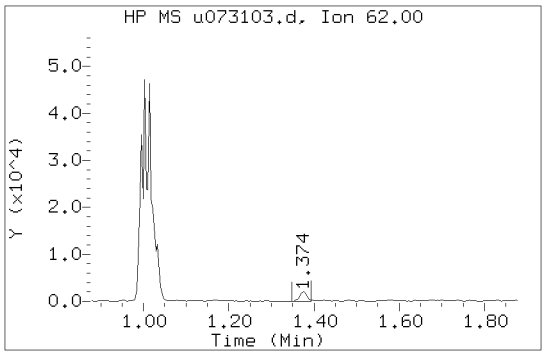
BEFORE

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AREA
2466
HEIGHT
2016
01-Aug-2023
21:03



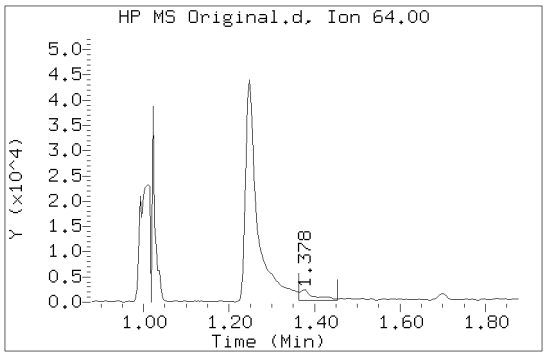
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HEIGHT
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01-Aug-2023
21:03



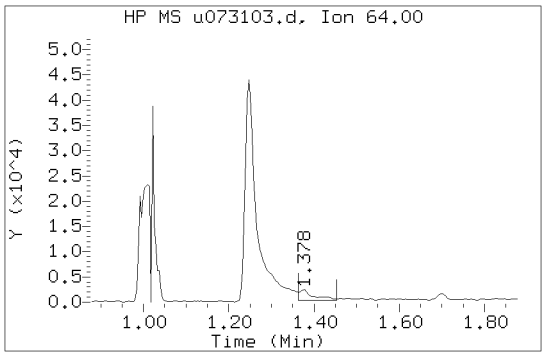
BEFORE

MASS
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AREA
5060
HEIGHT
2161
01-Aug-2023
21:03



AFTER

MASS
64
AREA
5060
HEIGHT
2161
01-Aug-2023
21:03

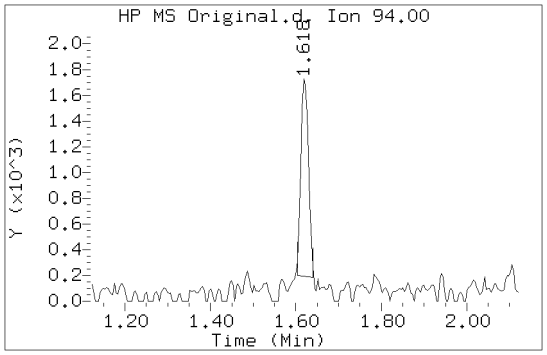


Bromomethane (74-83-9)

Reason Code:

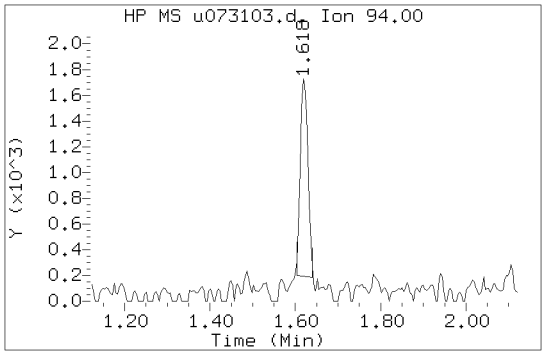
BEFORE

MASS
94
AREA
1966
HEIGHT
1531
01-Aug-2023
21:03



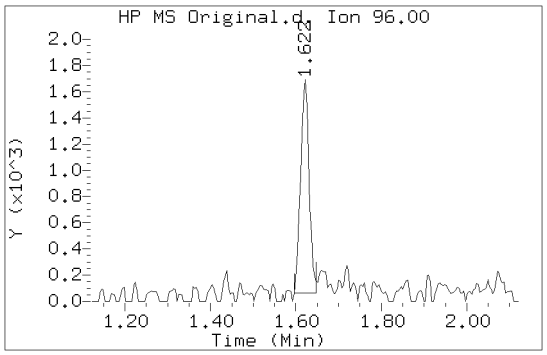
AFTER

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AREA
1966
HEIGHT
1531
01-Aug-2023
21:03



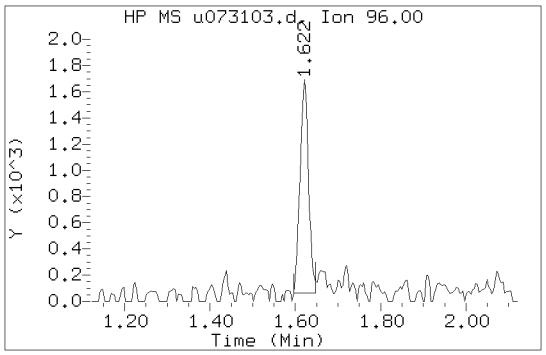
BEFORE

MASS
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AREA
2314
HEIGHT
1629
01-Aug-2023
21:03



AFTER

MASS
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2314
HEIGHT
1629
01-Aug-2023
21:03

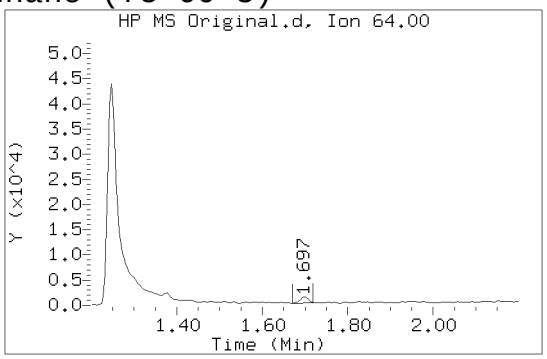


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

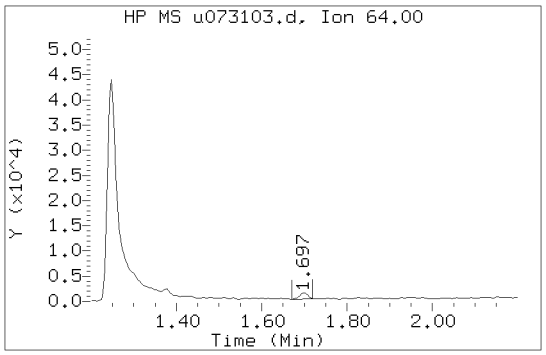
Chloroethane (75-00-3)

Reason Code:

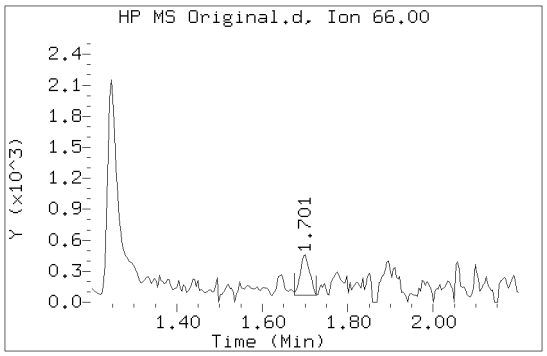
BEFORE
MASS
64
AREA
1758
HEIGHT
1241
01-Aug-2023
21:03



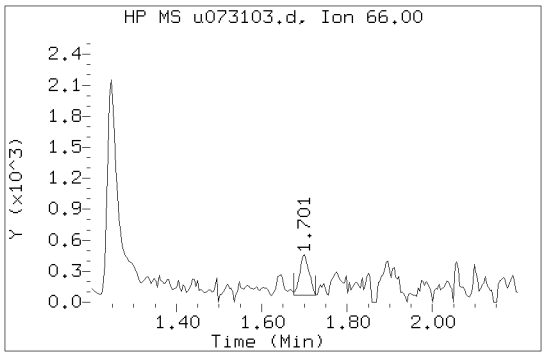
AFTER
MASS
64
AREA
1758
HEIGHT
1241
01-Aug-2023
21:03



BEFORE
MASS
66
AREA
610
HEIGHT
392
01-Aug-2023
21:03



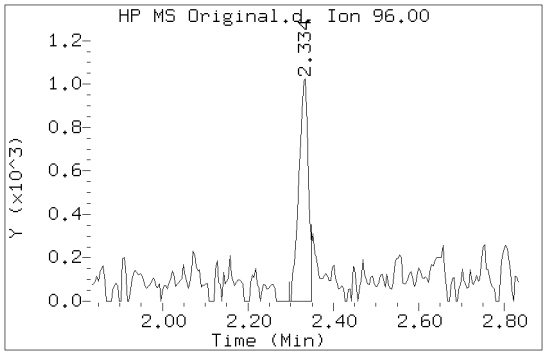
AFTER
MASS
66
AREA
610
HEIGHT
392
01-Aug-2023
21:03



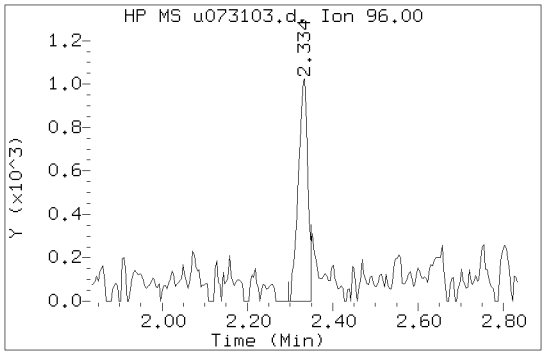
1,1-Dichloroethene (75-35-4)

Reason Code:

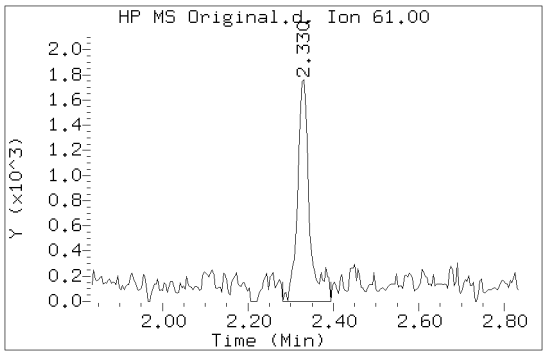
BEFORE
MASS
96
AREA
1618
HEIGHT
1024
01-Aug-2023
21:03



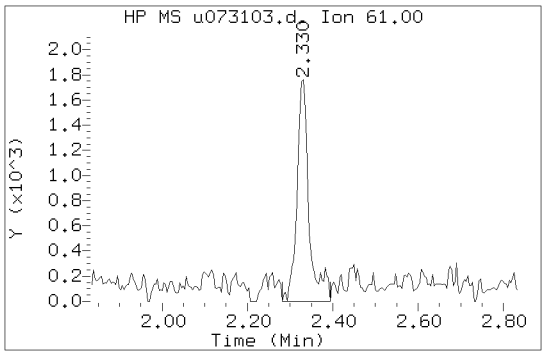
AFTER
MASS
96
AREA
1618
HEIGHT
1024
01-Aug-2023
21:03



BEFORE
MASS
61
AREA
3475
HEIGHT
1761
01-Aug-2023
21:03



AFTER
MASS
61
AREA
3475
HEIGHT
1761
01-Aug-2023
21:03



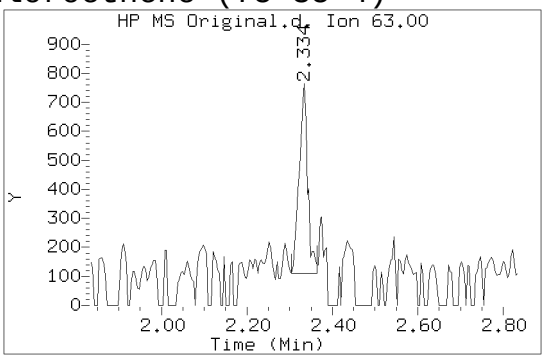
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InstruID : VOA9.i
LabSampID : VSTD000.5

1,1-Dichloroethene (75-35-4)

Reason Code:

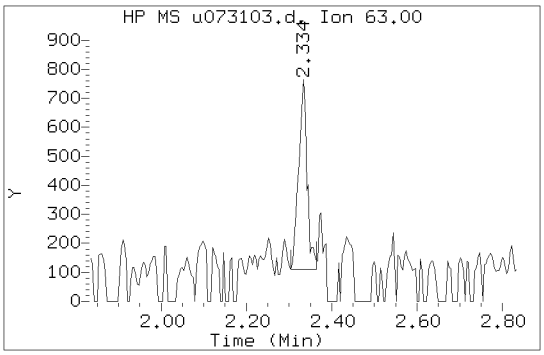
BEFORE

MASS
63
AREA
911
HEIGHT
654
01-Aug-2023
21:03



AFTER

MASS
63
AREA
911
HEIGHT
654
01-Aug-2023
21:03

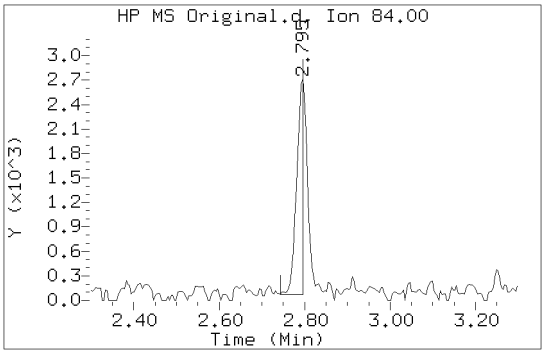


Methylene Chloride (75-09-2)

Reason Code:

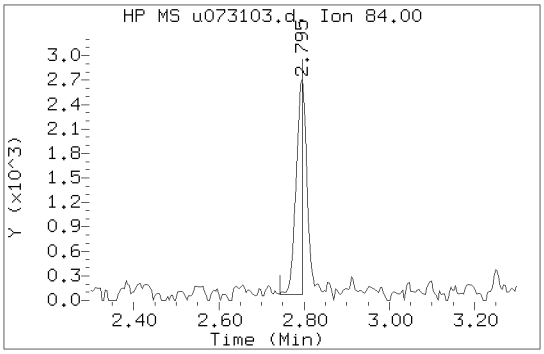
BEFORE

MASS
84
AREA
2838
HEIGHT
2649
01-Aug-2023
21:03



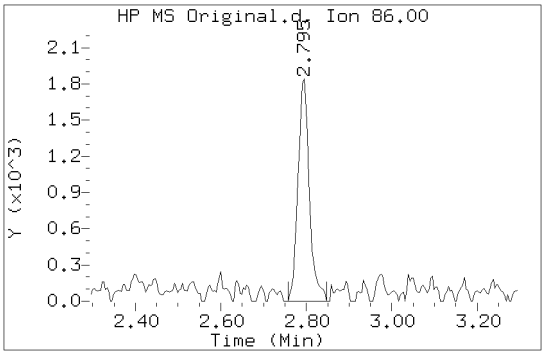
AFTER

MASS
84
AREA
2838
HEIGHT
2649
01-Aug-2023
21:03



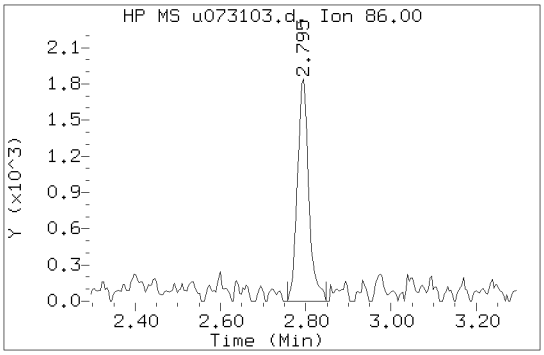
BEFORE

MASS
86
AREA
3474
HEIGHT
1841
01-Aug-2023
21:03



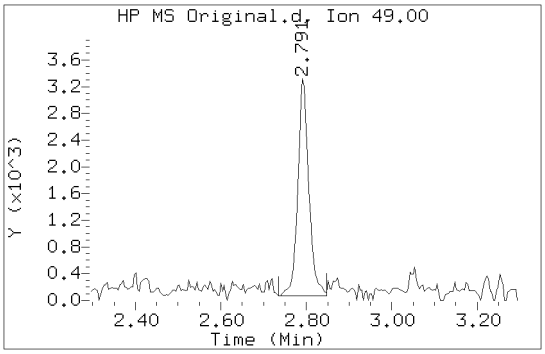
AFTER

MASS
86
AREA
3474
HEIGHT
1841
01-Aug-2023
21:03



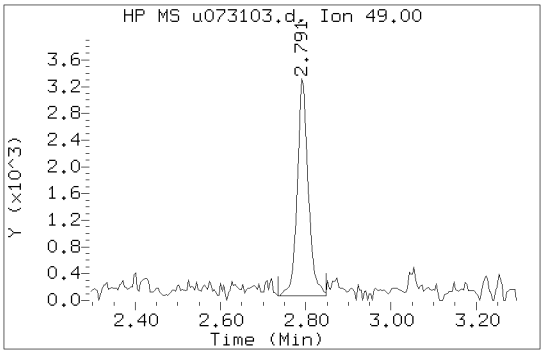
BEFORE

MASS
49
AREA
5941
HEIGHT
3251
01-Aug-2023
21:03



AFTER

MASS
49
AREA
5941
HEIGHT
3251
01-Aug-2023
21:03

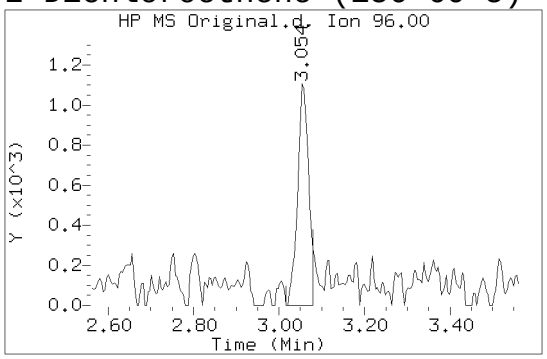


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LabSampID : VSTD000.5

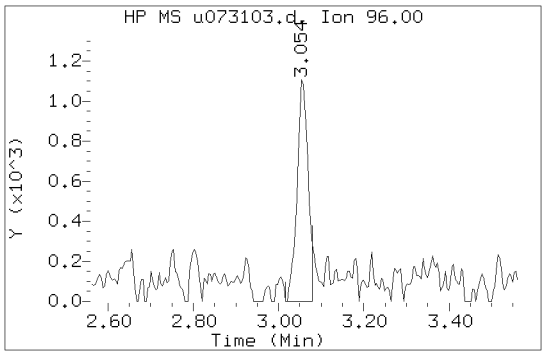
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

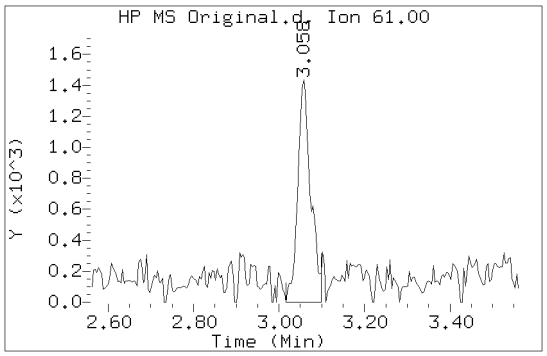
BEFORE
MASS
96
AREA
2038
HEIGHT
1107
01-Aug-2023
21:03



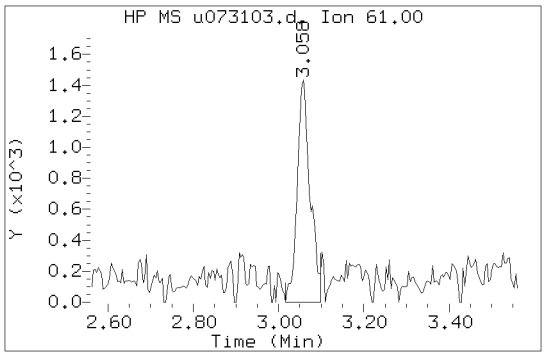
AFTER
MASS
96
AREA
2038
HEIGHT
1107
01-Aug-2023
21:03



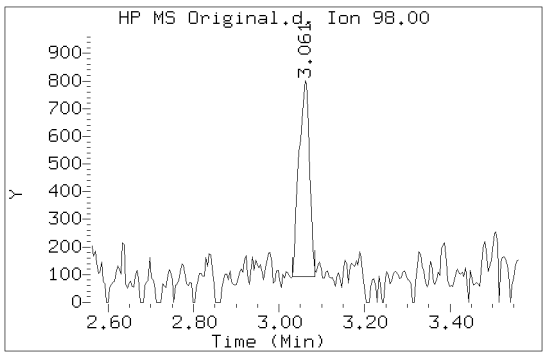
BEFORE
MASS
61
AREA
3084
HEIGHT
1435
01-Aug-2023
21:03



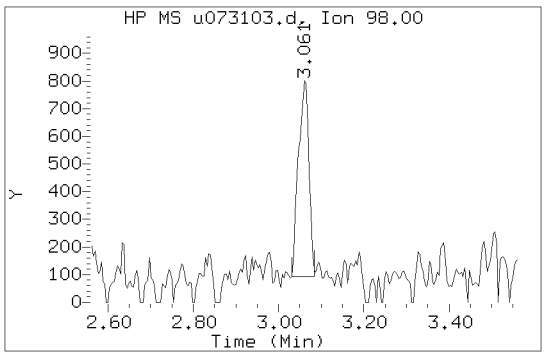
AFTER
MASS
61
AREA
3084
HEIGHT
1435
01-Aug-2023
21:03



BEFORE
MASS
98
AREA
1242
HEIGHT
708
01-Aug-2023
21:03



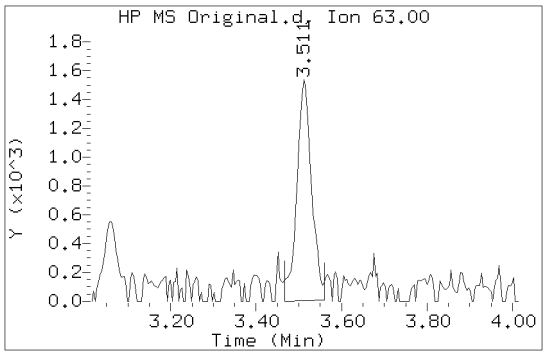
AFTER
MASS
98
AREA
1242
HEIGHT
708
01-Aug-2023
21:03



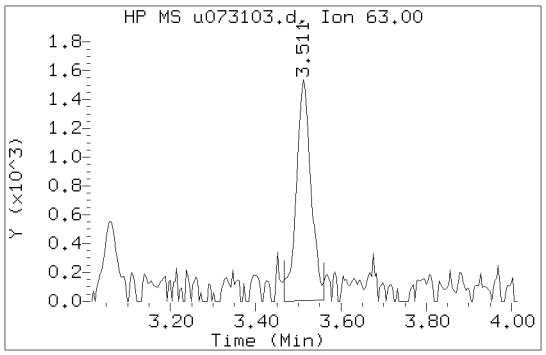
1,1-Dichloroethane (75-34-3)

Reason Code:

BEFORE
MASS
63
AREA
3735
HEIGHT
1534
01-Aug-2023
21:03



AFTER
MASS
63
AREA
3735
HEIGHT
1534
01-Aug-2023
21:03

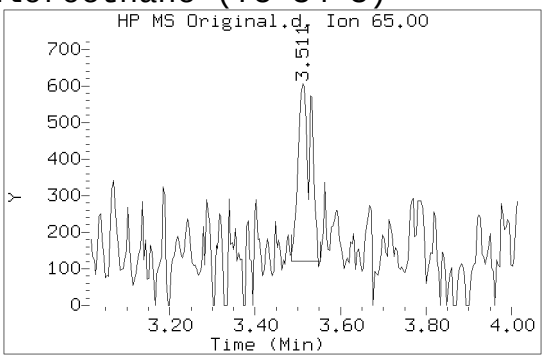


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

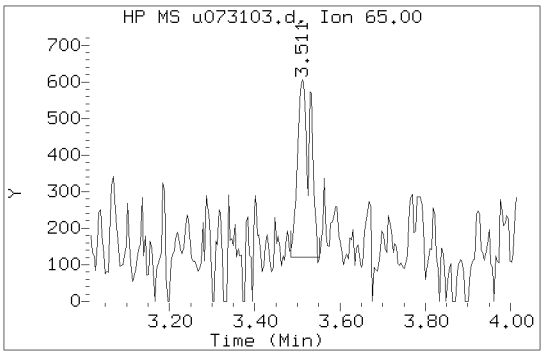
1,1-Dichloroethane (75-34-3)

Reason Code:

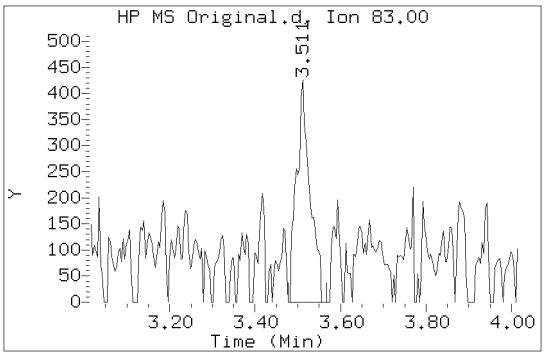
BEFORE
MASS
65
AREA
1020
HEIGHT
485
01-Aug-2023
21:03



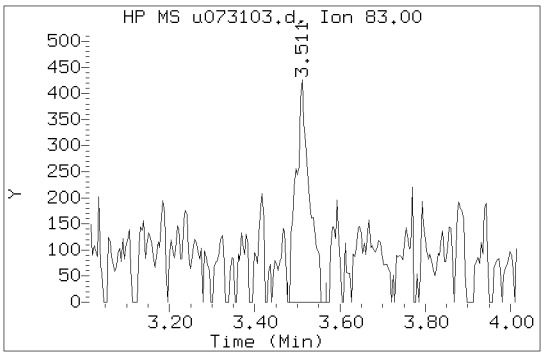
AFTER
MASS
65
AREA
1020
HEIGHT
485
01-Aug-2023
21:03



BEFORE
MASS
83
AREA
939
HEIGHT
426
01-Aug-2023
21:03



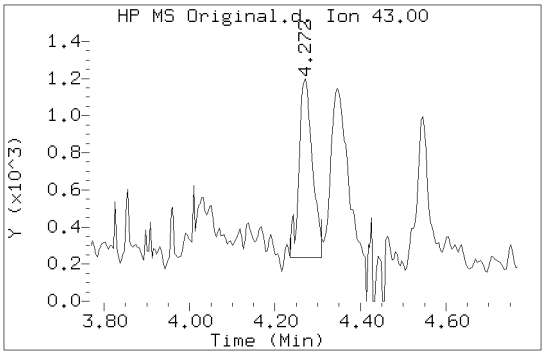
AFTER
MASS
83
AREA
939
HEIGHT
426
01-Aug-2023
21:03



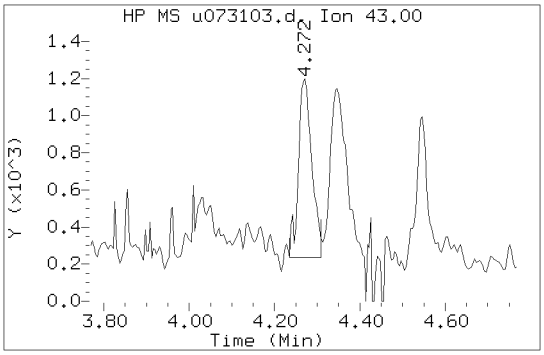
2-Butanone (78-93-3)

Reason Code:

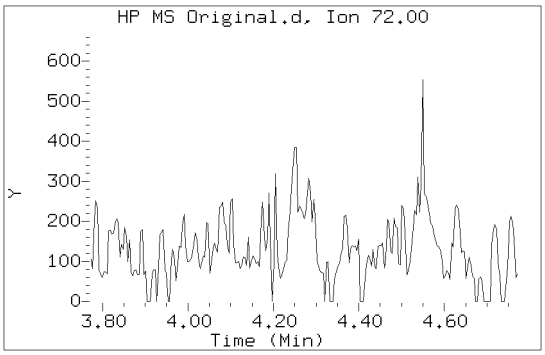
BEFORE
MASS
43
AREA
2140
HEIGHT
962
01-Aug-2023
21:03



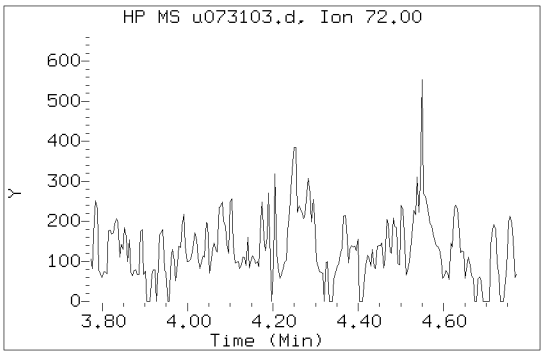
AFTER
MASS
43
AREA
2140
HEIGHT
962
01-Aug-2023
21:03



BEFORE
MASS
72
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
72
AREA
0
HEIGHT
0
01-Aug-2023
21:03

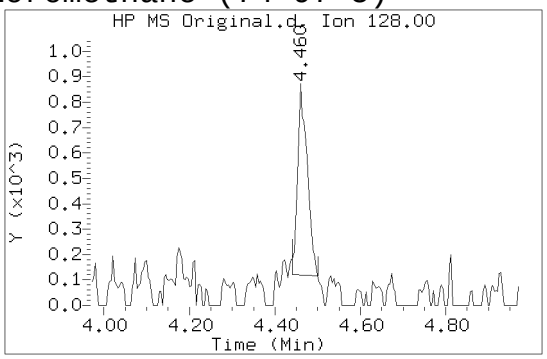


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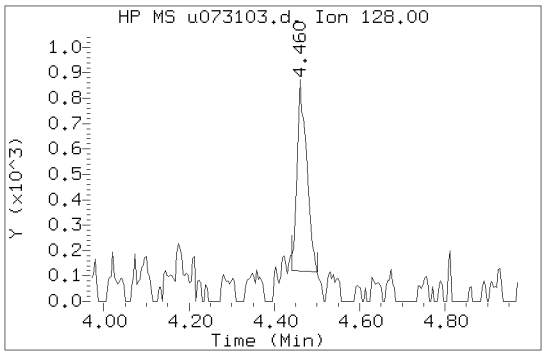
Bromochloromethane (74-97-5)

Reason Code:

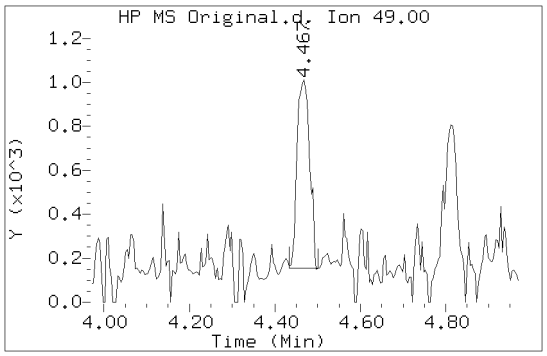
BEFORE
MASS
128
AREA
1195
HEIGHT
754
01-Aug-2023
21:03



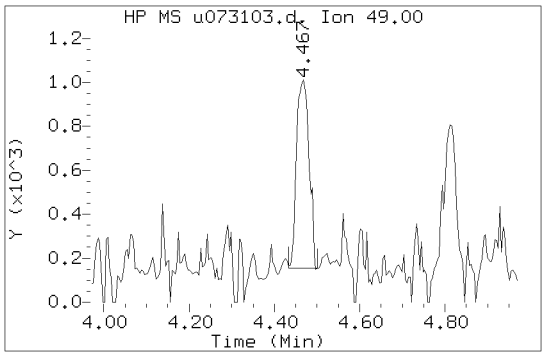
AFTER
MASS
128
AREA
1195
HEIGHT
754
01-Aug-2023
21:03



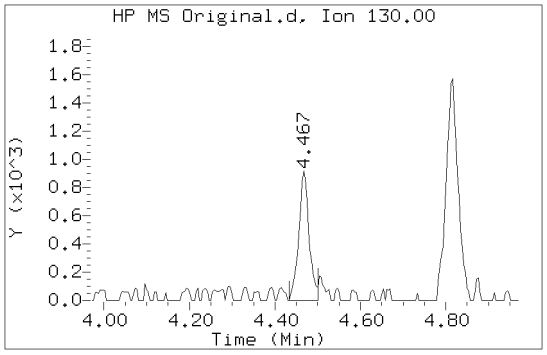
BEFORE
MASS
49
AREA
1771
HEIGHT
856
01-Aug-2023
21:03



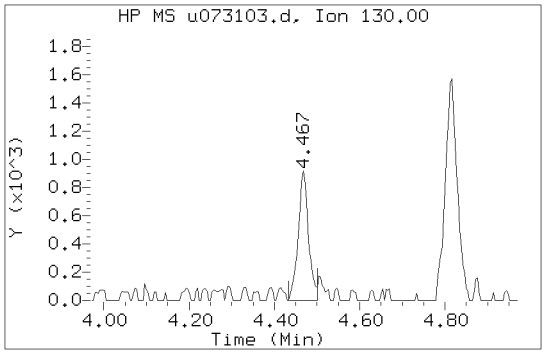
AFTER
MASS
49
AREA
1771
HEIGHT
856
01-Aug-2023
21:03



BEFORE
MASS
130
AREA
1571
HEIGHT
921
01-Aug-2023
21:03



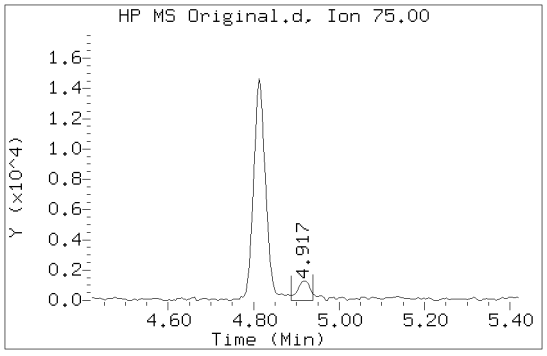
AFTER
MASS
130
AREA
1571
HEIGHT
921
01-Aug-2023
21:03



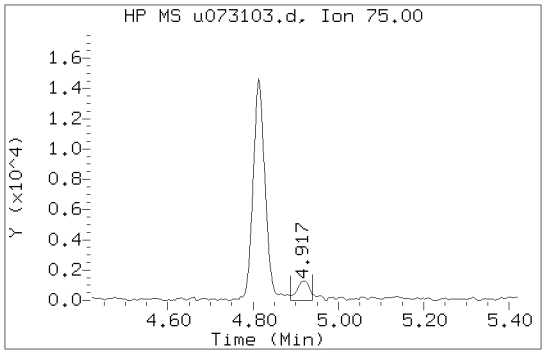
1,1-Dichloropropene (563-58-6)

Reason Code:

BEFORE
MASS
75
AREA
2695
HEIGHT
1263
01-Aug-2023
21:03



AFTER
MASS
75
AREA
2695
HEIGHT
1263
01-Aug-2023
21:03

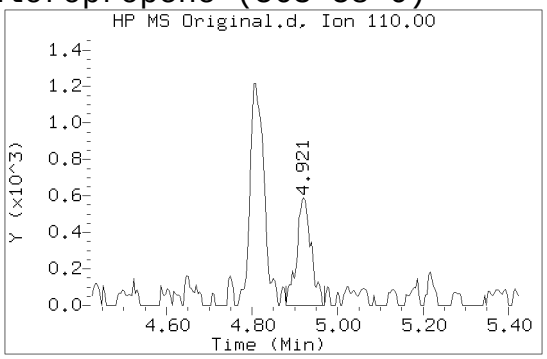


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InstruID : VOA9.i
LabSampID : VSTD000.5

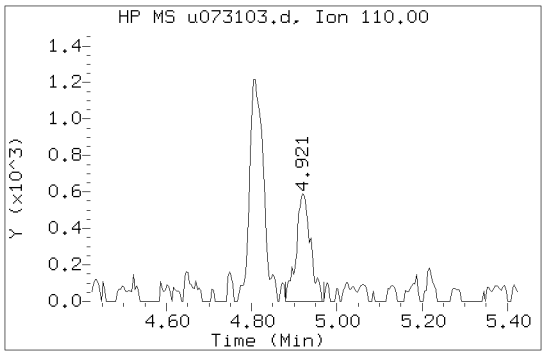
1,1-Dichloropropene (563-58-6)

Reason Code:

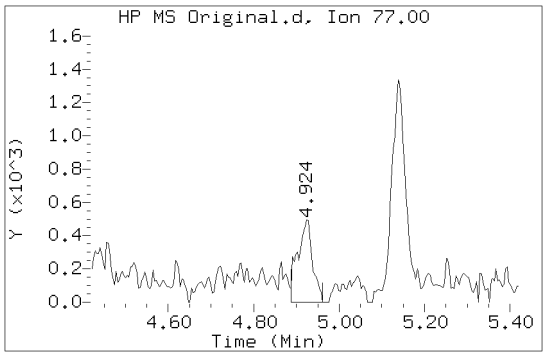
BEFORE
MASS
110
AREA
1403
HEIGHT
591
01-Aug-2023
21:03



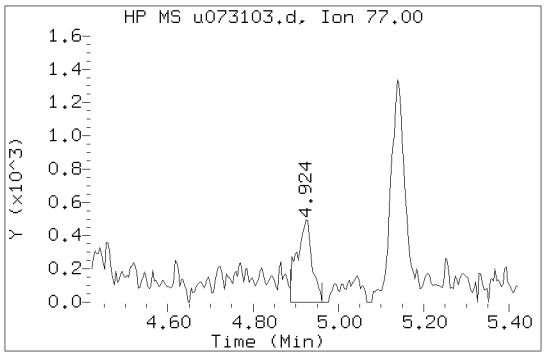
AFTER
MASS
110
AREA
1403
HEIGHT
591
01-Aug-2023
21:03



BEFORE
MASS
77
AREA
1226
HEIGHT
495
01-Aug-2023
21:03



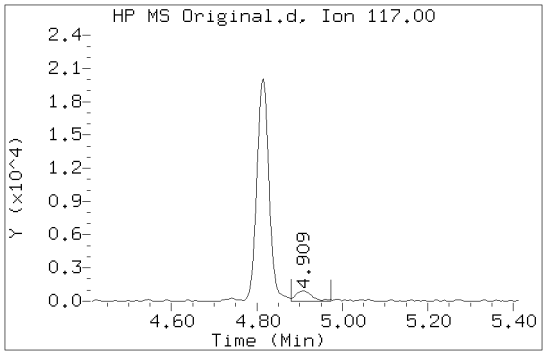
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MASS
77
AREA
1226
HEIGHT
495
01-Aug-2023
21:03



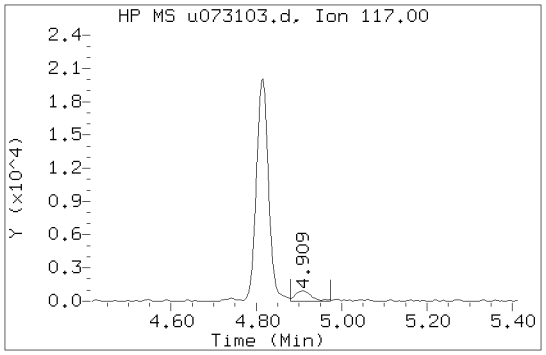
Carbon Tetrachloride (56-23-5)

Reason Code:

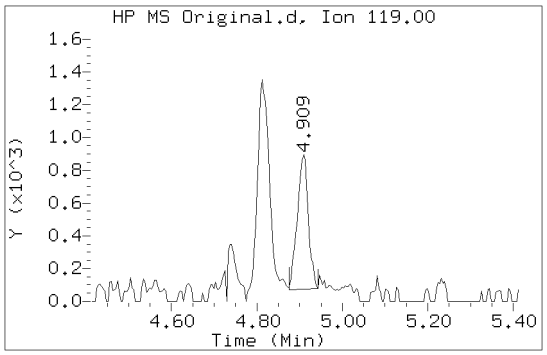
BEFORE
MASS
117
AREA
2525
HEIGHT
944
01-Aug-2023
21:03



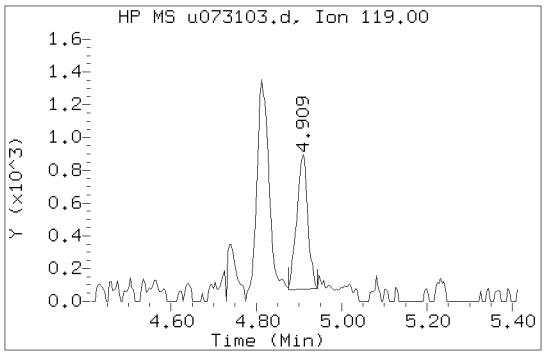
AFTER
MASS
117
AREA
2525
HEIGHT
944
01-Aug-2023
21:03



BEFORE
MASS
119
AREA
1515
HEIGHT
821
01-Aug-2023
21:03



AFTER
MASS
119
AREA
1515
HEIGHT
821
01-Aug-2023
21:03

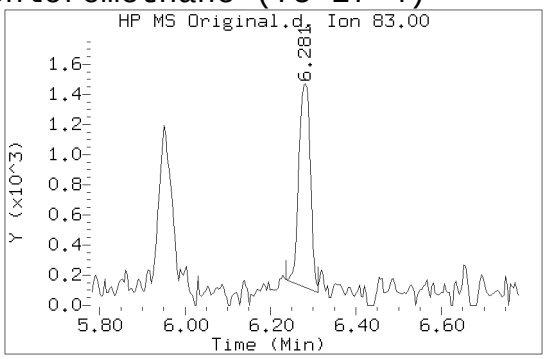


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

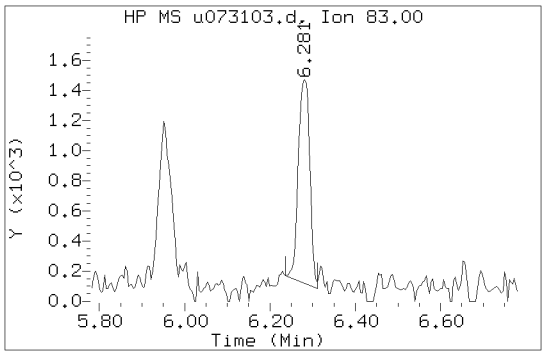
Bromodichloromethane (75-27-4)

Reason Code:

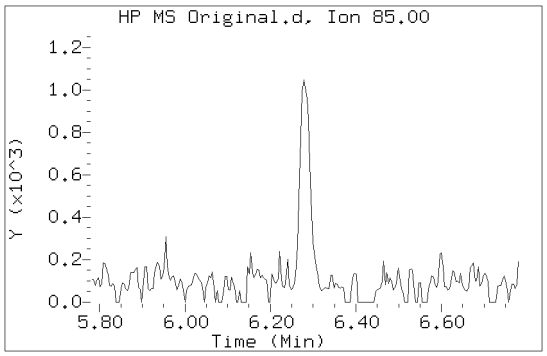
BEFORE
MASS
83
AREA
2588
HEIGHT
1353
01-Aug-2023
21:03



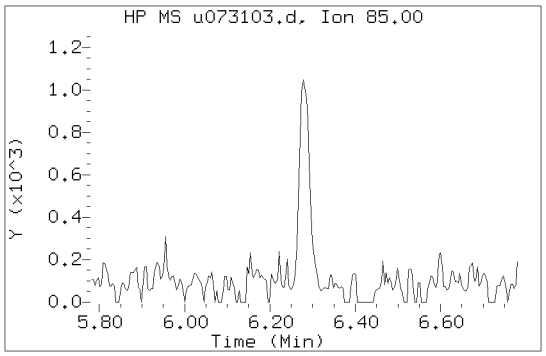
AFTER
MASS
83
AREA
2588
HEIGHT
1353
01-Aug-2023
21:03



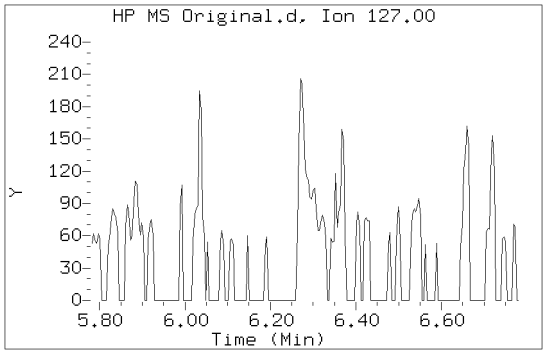
BEFORE
MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03



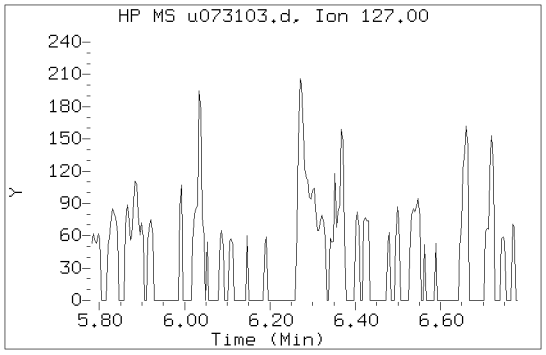
AFTER
MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
127
AREA
0
HEIGHT
0
01-Aug-2023
21:03



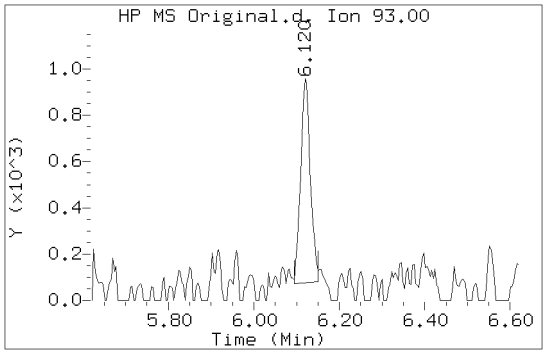
AFTER
MASS
127
AREA
0
HEIGHT
0
01-Aug-2023
21:03



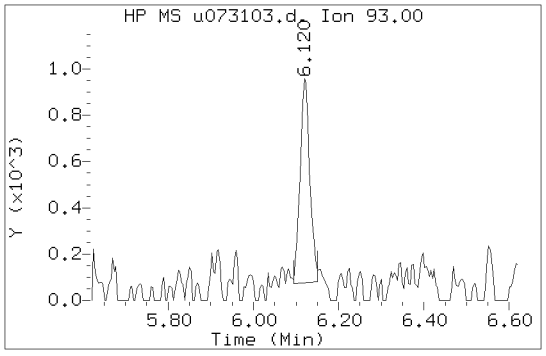
Dibromomethane (74-95-3)

Reason Code:

BEFORE
MASS
93
AREA
1420
HEIGHT
881
01-Aug-2023
21:03



AFTER
MASS
93
AREA
1420
HEIGHT
881
01-Aug-2023
21:03

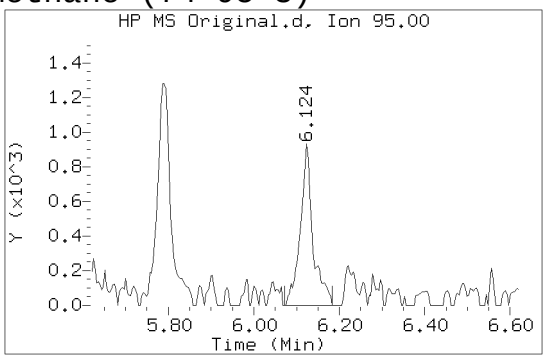


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InstruID : VOA9.i
LabSampID : VSTD000.5

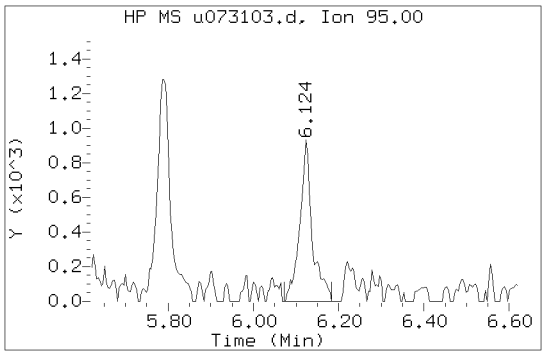
Dibromomethane (74-95-3)

Reason Code:

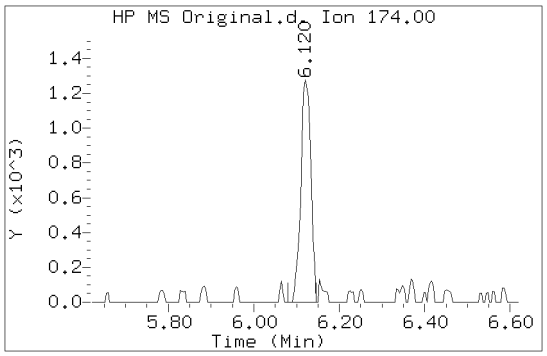
BEFORE
MASS
95
AREA
1928
HEIGHT
933
01-Aug-2023
21:03



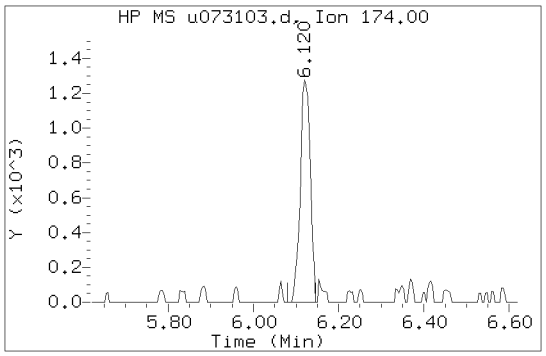
AFTER
MASS
95
AREA
1928
HEIGHT
933
01-Aug-2023
21:03



BEFORE
MASS
174
AREA
2128
HEIGHT
1277
01-Aug-2023
21:03



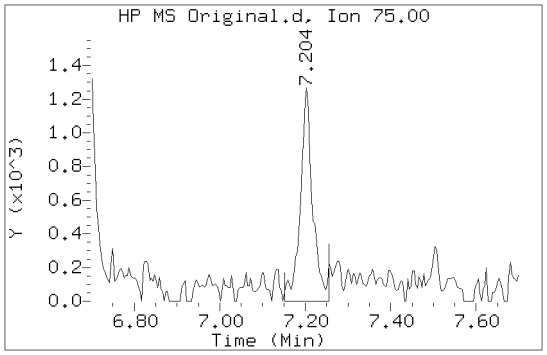
AFTER
MASS
174
AREA
2128
HEIGHT
1277
01-Aug-2023
21:03



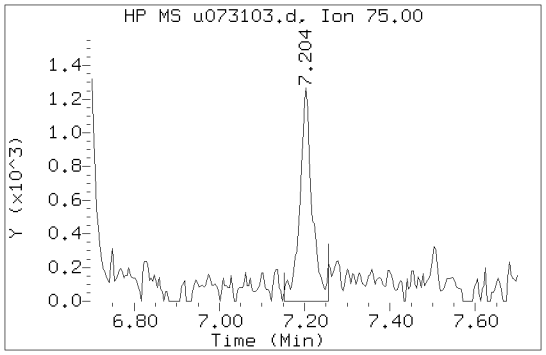
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

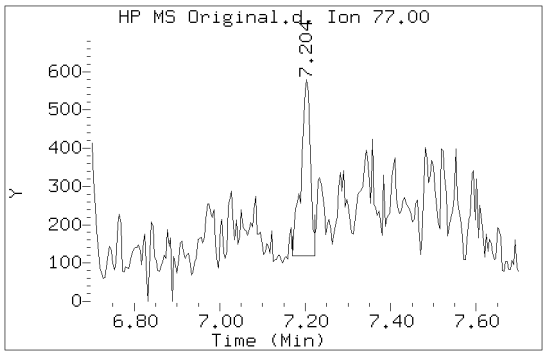
BEFORE
MASS
75
AREA
2626
HEIGHT
1265
01-Aug-2023
21:03



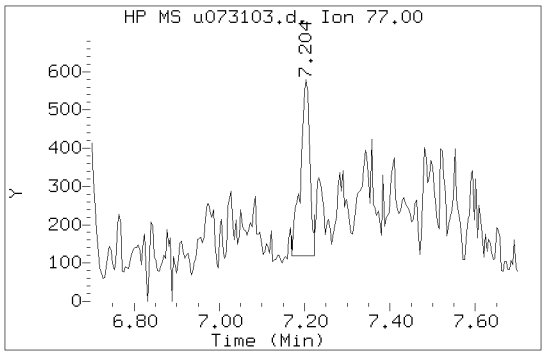
AFTER
MASS
75
AREA
2626
HEIGHT
1265
01-Aug-2023
21:03



BEFORE
MASS
77
AREA
719
HEIGHT
460
01-Aug-2023
21:03



AFTER
MASS
77
AREA
719
HEIGHT
460
01-Aug-2023
21:03

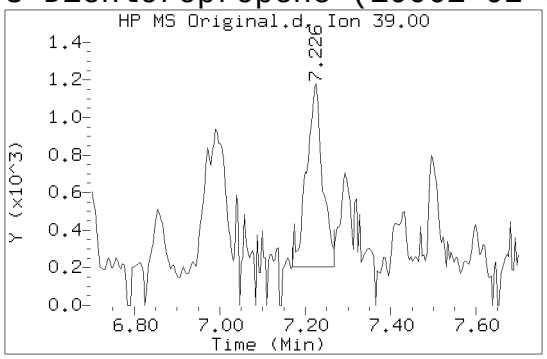


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InstruID : VOA9.i
LabSampID : VSTD000.5

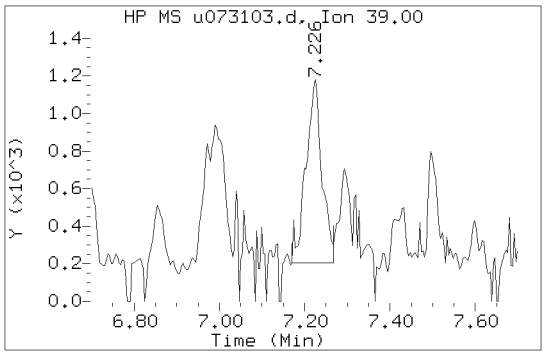
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
39
AREA
2560
HEIGHT
976
01-Aug-2023
21:03



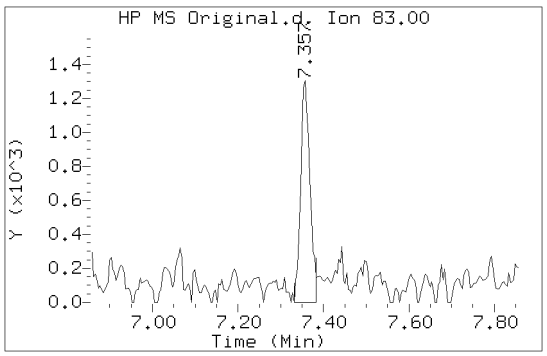
AFTER
MASS
39
AREA
2560
HEIGHT
976
01-Aug-2023
21:03



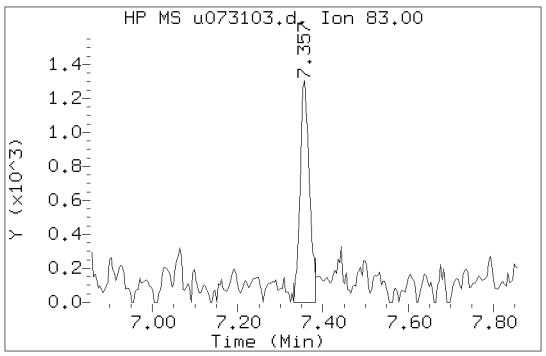
1,1,2-Trichloroethane (79-00-5)

Reason Code:

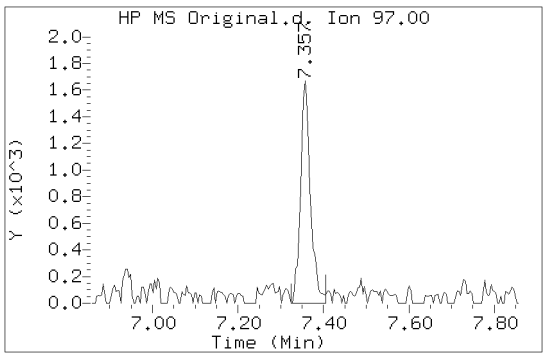
BEFORE
MASS
83
AREA
2027
HEIGHT
1305
01-Aug-2023
21:03



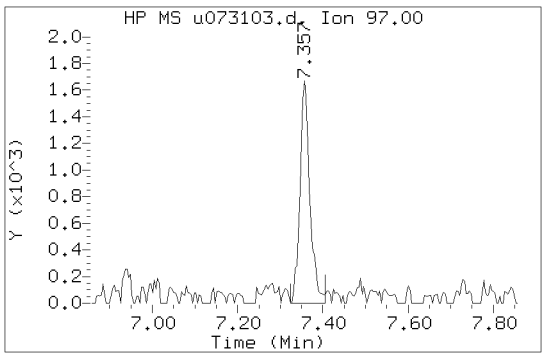
AFTER
MASS
83
AREA
2027
HEIGHT
1305
01-Aug-2023
21:03



BEFORE
MASS
97
AREA
2747
HEIGHT
1669
01-Aug-2023
21:03



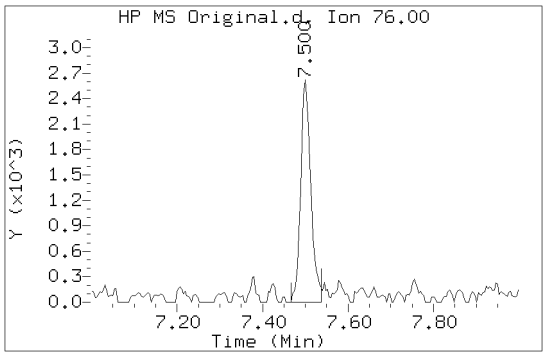
AFTER
MASS
97
AREA
2747
HEIGHT
1669
01-Aug-2023
21:03



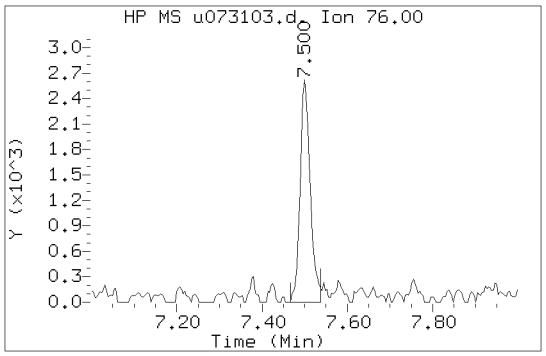
1,3-Dichloropropane (142-28-9)

Reason Code:

BEFORE
MASS
76
AREA
4407
HEIGHT
2620
01-Aug-2023
21:03



AFTER
MASS
76
AREA
4407
HEIGHT
2620
01-Aug-2023
21:03

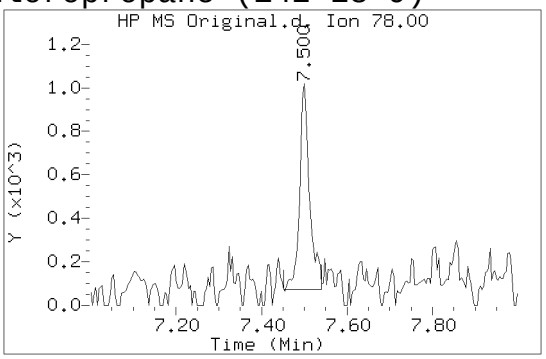


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

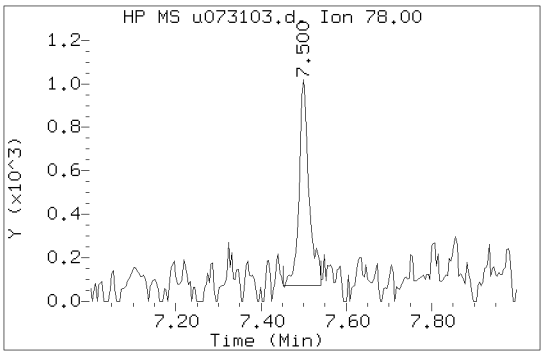
1,3-Dichloropropane (142-28-9)

Reason Code:

BEFORE
MASS
78
AREA
1553
HEIGHT
946
01-Aug-2023
21:03



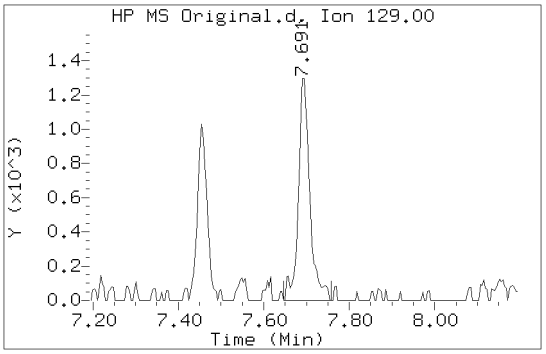
AFTER
MASS
78
AREA
1553
HEIGHT
946
01-Aug-2023
21:03



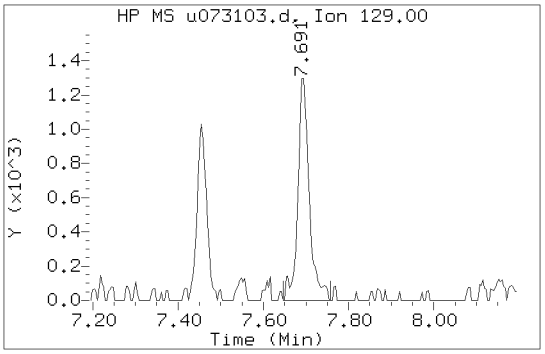
Dibromochloromethane (124-48-1)

Reason Code:

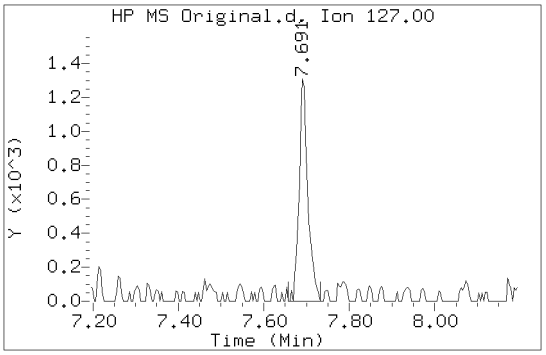
BEFORE
MASS
129
AREA
2473
HEIGHT
1295
01-Aug-2023
21:03



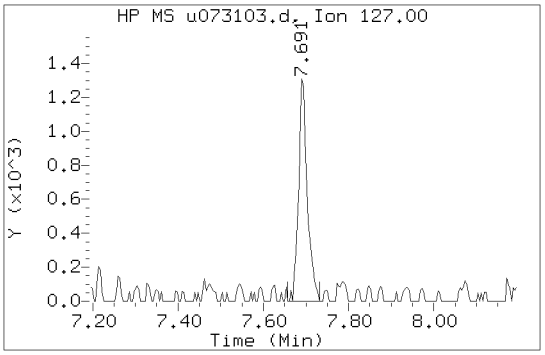
AFTER
MASS
129
AREA
2473
HEIGHT
1295
01-Aug-2023
21:03



BEFORE
MASS
127
AREA
1912
HEIGHT
1309
01-Aug-2023
21:03



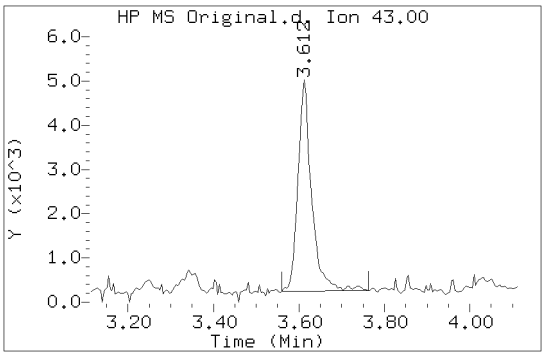
AFTER
MASS
127
AREA
1912
HEIGHT
1309
01-Aug-2023
21:03



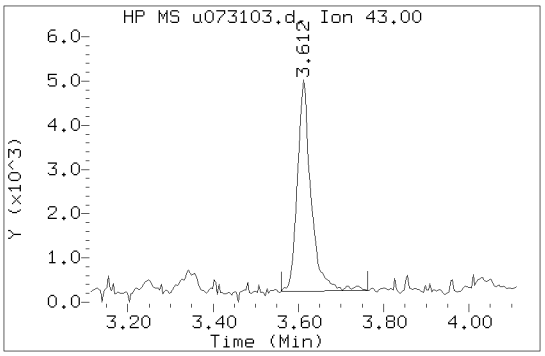
Vinyl Acetate (108-05-4)

Reason Code:

BEFORE
MASS
43
AREA
10832
HEIGHT
4782
01-Aug-2023
21:03



AFTER
MASS
43
AREA
10832
HEIGHT
4782
01-Aug-2023
21:03

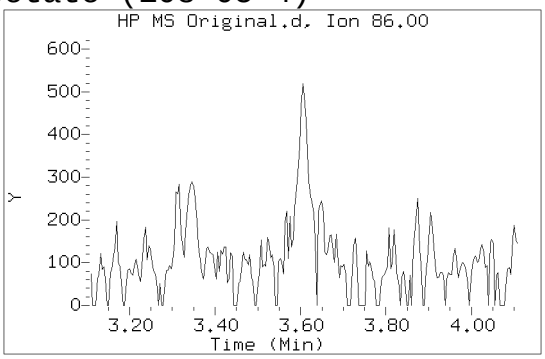


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Vinyl Acetate (108-05-4)

BEFORE

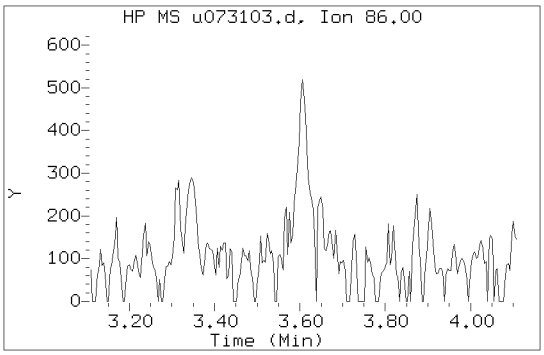
MASS
86
AREA
0
HEIGHT
0
01-Aug-2023
21:03



Reason Code:

AFTER

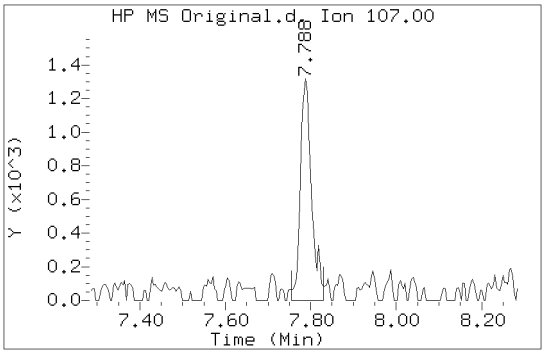
MASS
86
AREA
0
HEIGHT
0
01-Aug-2023
21:03



1,2-Dibromoethane (106-93-4)

BEFORE

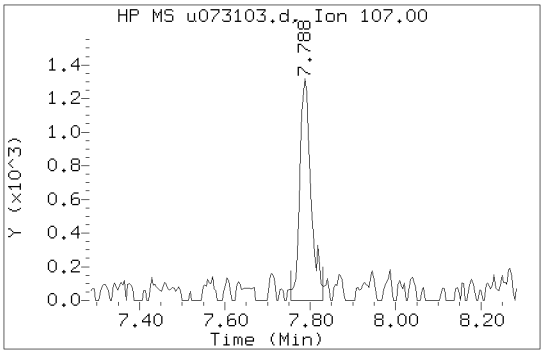
MASS
107
AREA
2440
HEIGHT
1318
01-Aug-2023
21:03



Reason Code:

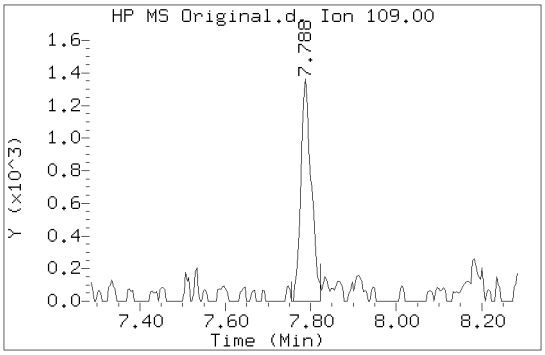
AFTER

MASS
107
AREA
2440
HEIGHT
1318
01-Aug-2023
21:03



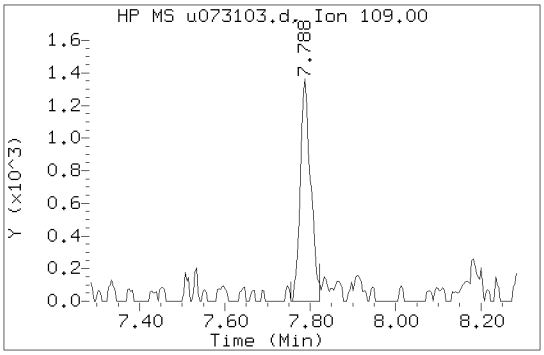
BEFORE

MASS
109
AREA
2340
HEIGHT
1363
01-Aug-2023
21:03



AFTER

MASS
109
AREA
2340
HEIGHT
1363
01-Aug-2023
21:03

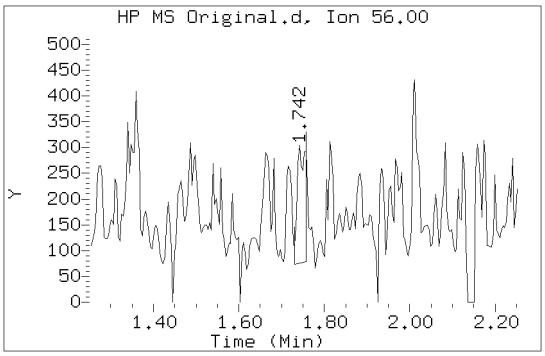


Acrolein (107-02-8)

Reason Code:

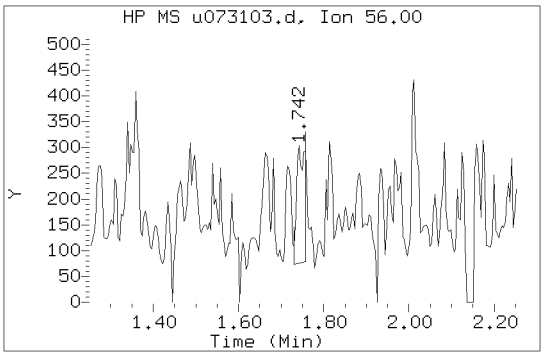
BEFORE

MASS
56
AREA
302
HEIGHT
227
01-Aug-2023
21:03



AFTER

MASS
56
AREA
302
HEIGHT
227
01-Aug-2023
21:03

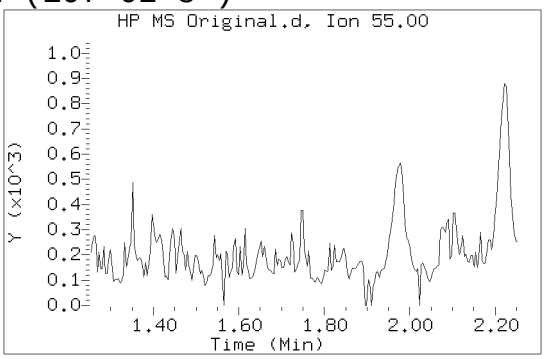


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

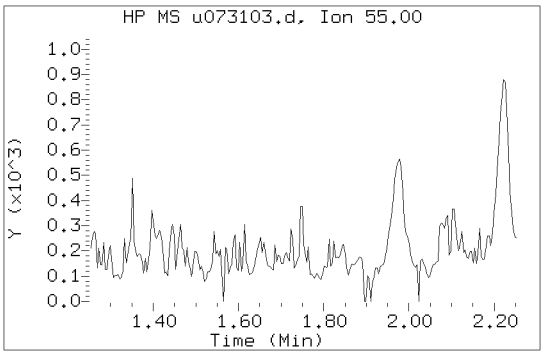
Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
55
AREA
0
HEIGHT
0
01-Aug-2023
21:03



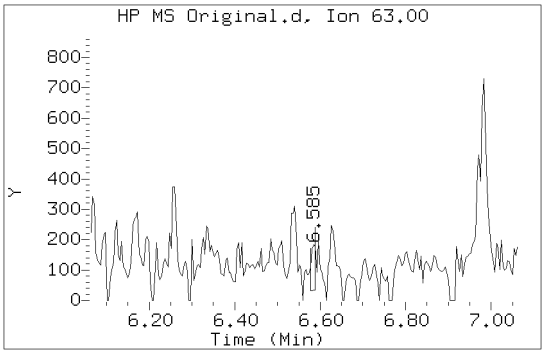
AFTER
MASS
55
AREA
0
HEIGHT
0
01-Aug-2023
21:03



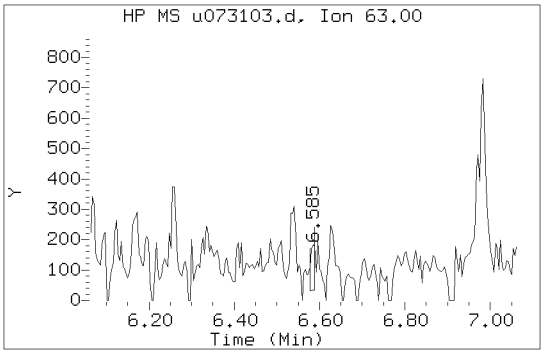
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

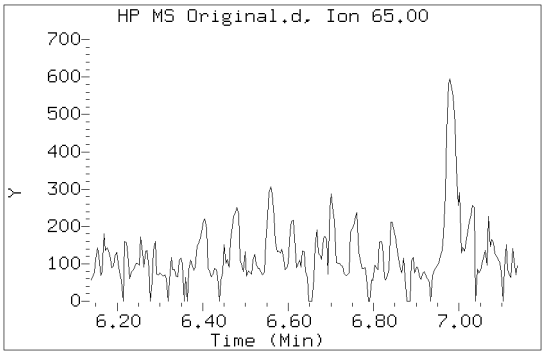
BEFORE
MASS
63
AREA
114
HEIGHT
151
01-Aug-2023
21:03



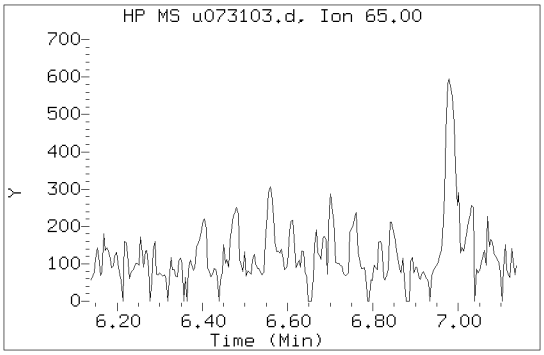
AFTER
MASS
63
AREA
114
HEIGHT
151
01-Aug-2023
21:03



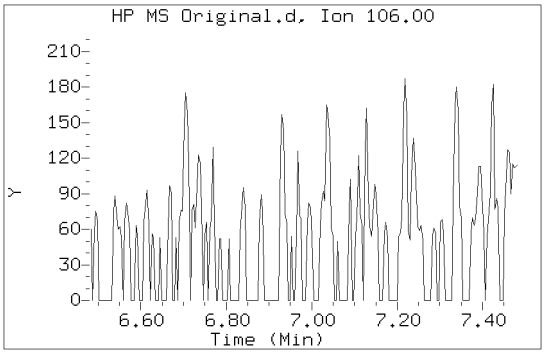
BEFORE
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



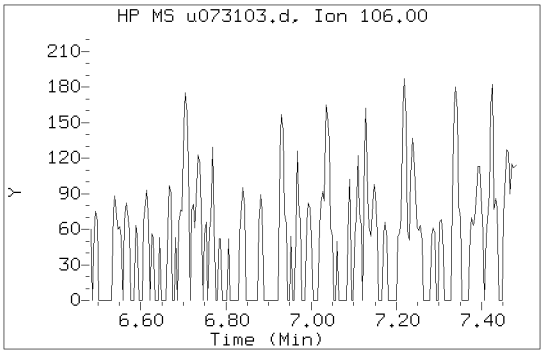
AFTER
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03

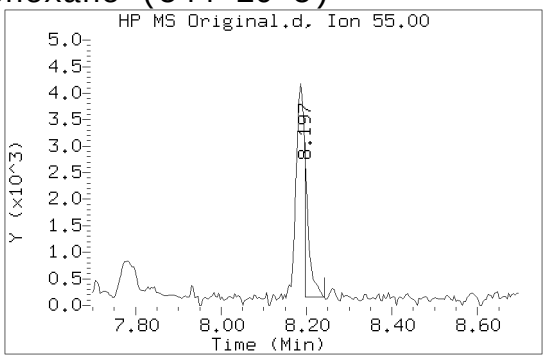


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

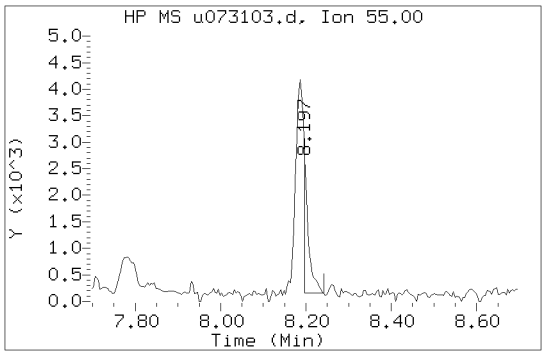
1-Chlorohexane (544-10-5)

Reason Code:

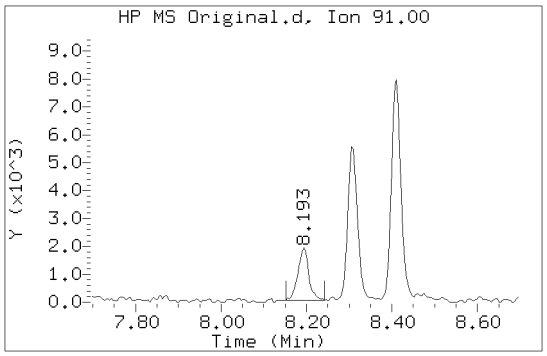
BEFORE
MASS
55
AREA
1840
HEIGHT
2555
01-Aug-2023
21:03



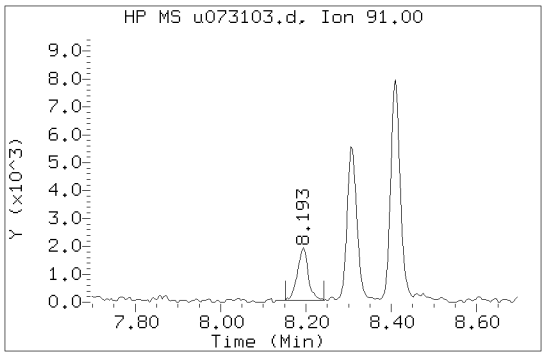
AFTER
MASS
55
AREA
1840
HEIGHT
2555
01-Aug-2023
21:03



BEFORE
MASS
91
AREA
3423
HEIGHT
1898
01-Aug-2023
21:03



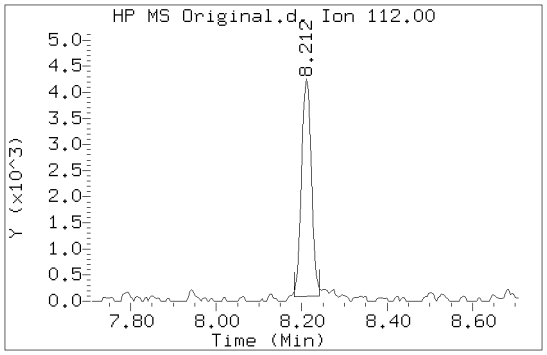
AFTER
MASS
91
AREA
3423
HEIGHT
1898
01-Aug-2023
21:03



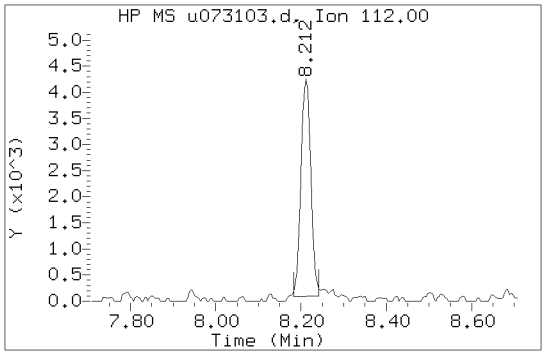
Chlorobenzene (108-90-7)

Reason Code:

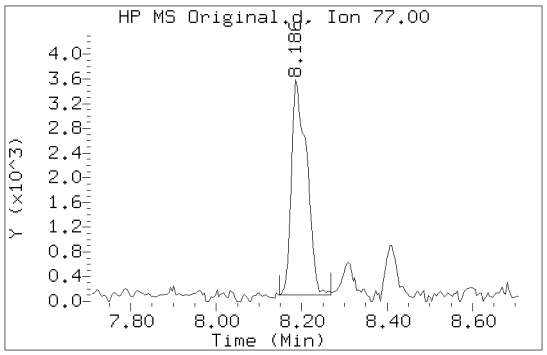
BEFORE
MASS
112
AREA
6853
HEIGHT
4160
01-Aug-2023
21:03



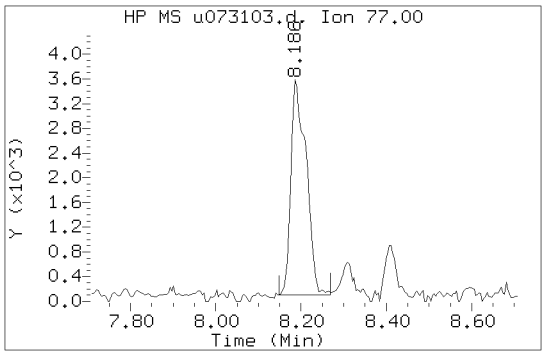
AFTER
MASS
112
AREA
6853
HEIGHT
4160
01-Aug-2023
21:03



BEFORE
MASS
77
AREA
8764
HEIGHT
3480
01-Aug-2023
21:03



AFTER
MASS
77
AREA
8764
HEIGHT
3480
01-Aug-2023
21:03

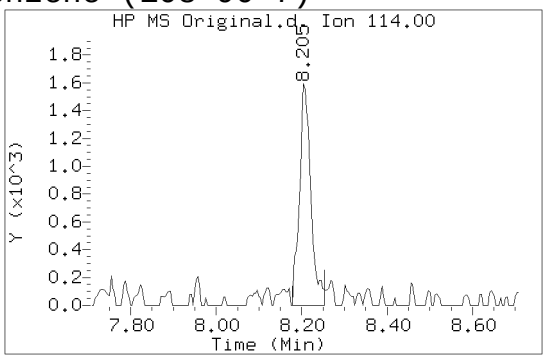


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Chlorobenzene (108-90-7)

BEFORE

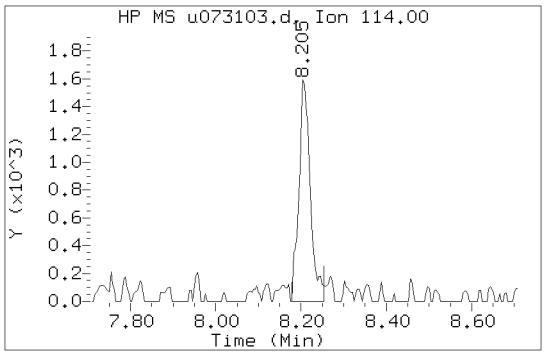
MASS
114
AREA
3009
HEIGHT
1594
01-Aug-2023
21:03



Reason Code:

AFTER

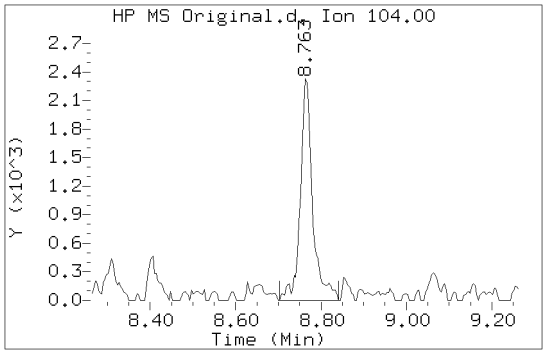
MASS
114
AREA
3009
HEIGHT
1594
01-Aug-2023
21:03



Styrene (100-42-5)

BEFORE

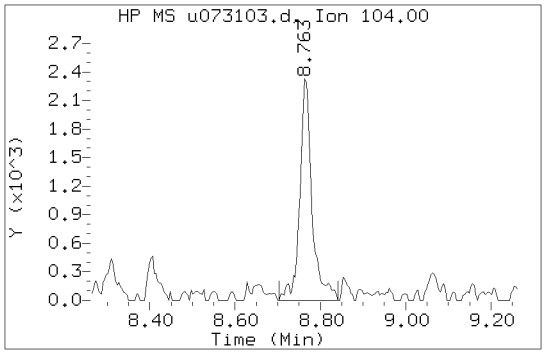
MASS
104
AREA
4750
HEIGHT
2329
01-Aug-2023
21:03



Reason Code:

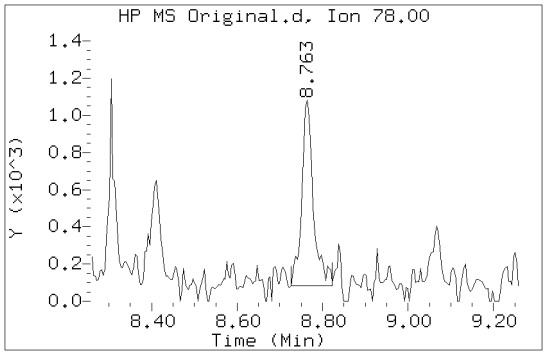
AFTER

MASS
104
AREA
4750
HEIGHT
2329
01-Aug-2023
21:03



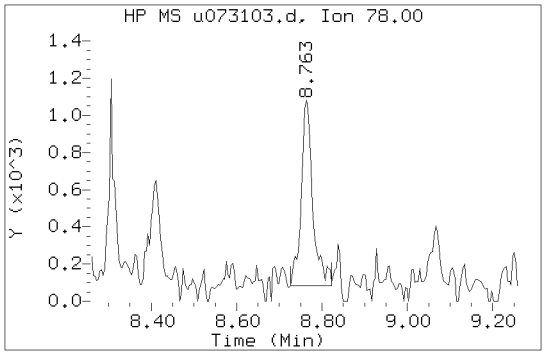
BEFORE

MASS
78
AREA
1928
HEIGHT
997
01-Aug-2023
21:03



AFTER

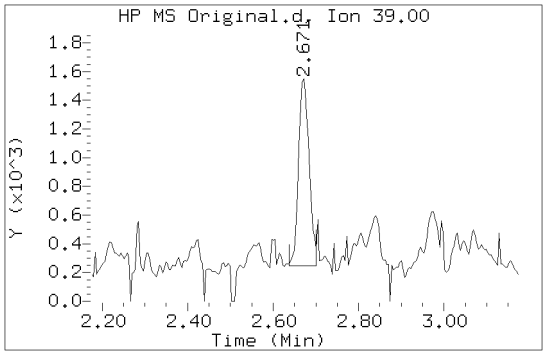
MASS
78
AREA
1928
HEIGHT
997
01-Aug-2023
21:03



Acetonitrile (75-05-8)

BEFORE

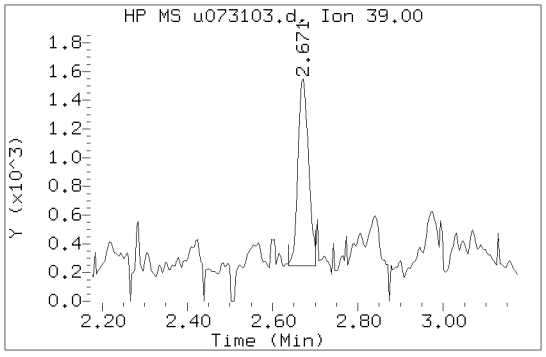
MASS
39
AREA
2314
HEIGHT
1304
01-Aug-2023
21:03



Reason Code:

AFTER

MASS
39
AREA
2314
HEIGHT
1304
01-Aug-2023
21:03

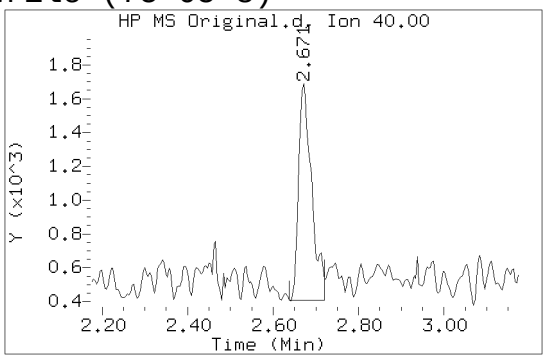


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

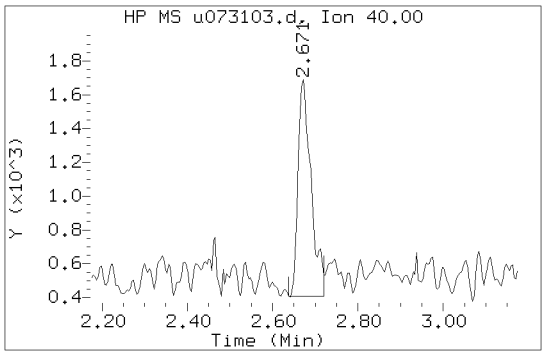
Acetonitrile (75-05-8)

Reason Code:

BEFORE
MASS
40
AREA
2767
HEIGHT
1280
01-Aug-2023
21:03



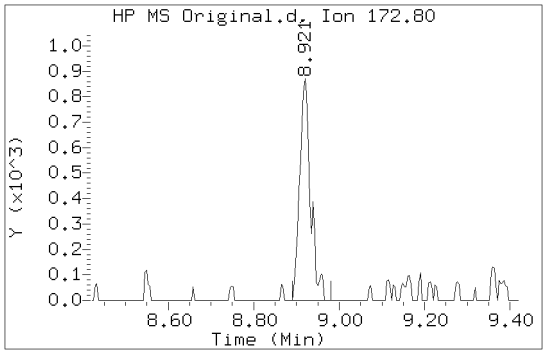
AFTER
MASS
40
AREA
2767
HEIGHT
1280
01-Aug-2023
21:03



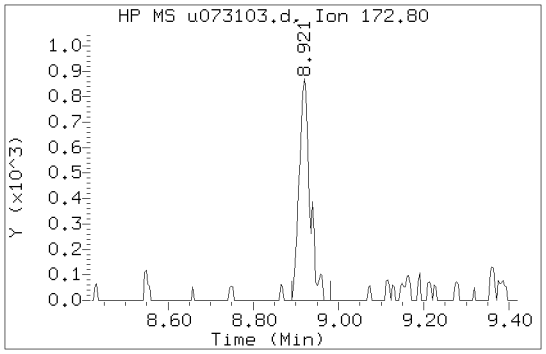
Bromoform (75-25-2)

Reason Code:

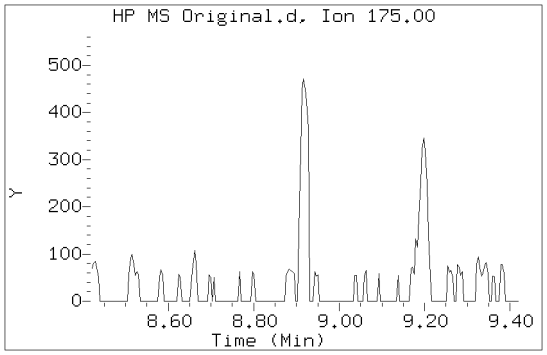
BEFORE
MASS
172.8
AREA
1569
HEIGHT
871
01-Aug-2023
21:03



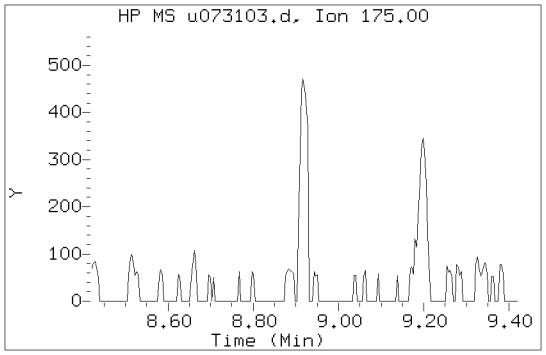
AFTER
MASS
172.8
AREA
1569
HEIGHT
871
01-Aug-2023
21:03



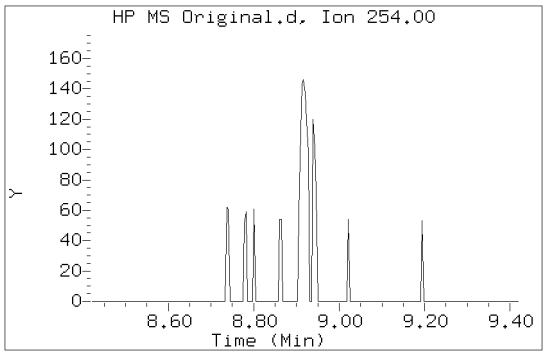
BEFORE
MASS
175
AREA
0
HEIGHT
0
01-Aug-2023
21:03



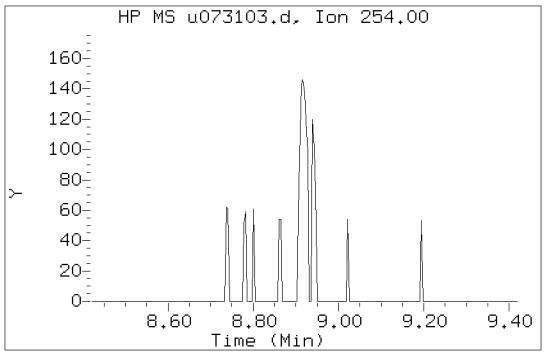
AFTER
MASS
175
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
254
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
254
AREA
0
HEIGHT
0
01-Aug-2023
21:03

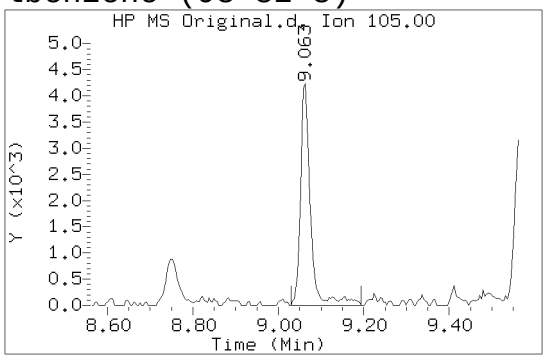


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

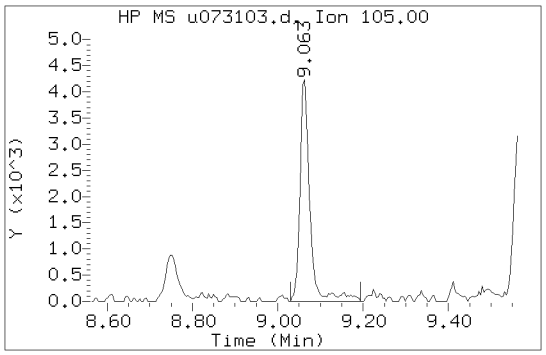
Isopropylbenzene (98-82-8)

Reason Code:

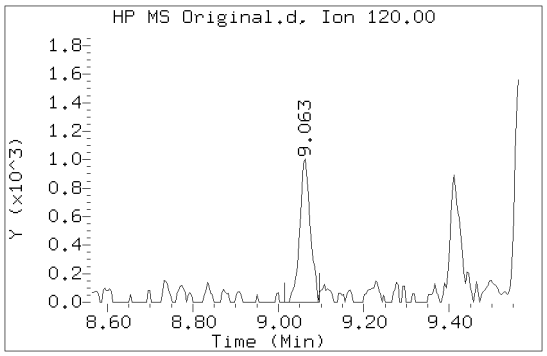
BEFORE
MASS
105
AREA
7003
HEIGHT
4232
01-Aug-2023
21:03



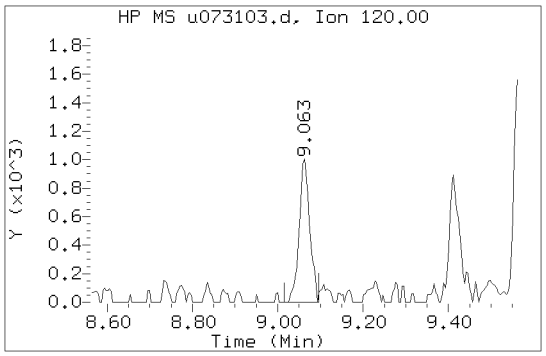
AFTER
MASS
105
AREA
7003
HEIGHT
4232
01-Aug-2023
21:03



BEFORE
MASS
120
AREA
1773
HEIGHT
1004
01-Aug-2023
21:03



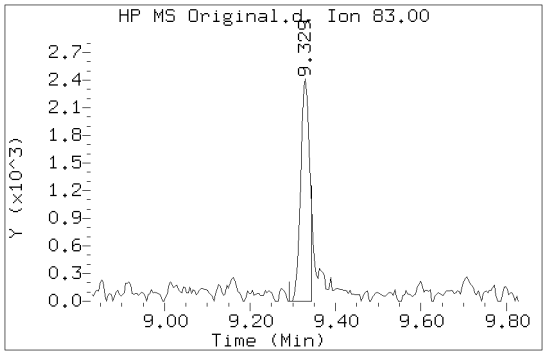
AFTER
MASS
120
AREA
1773
HEIGHT
1004
01-Aug-2023
21:03



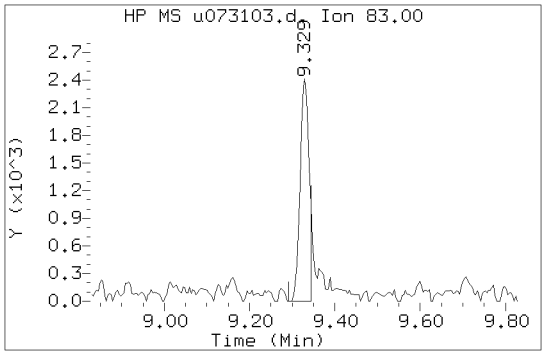
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

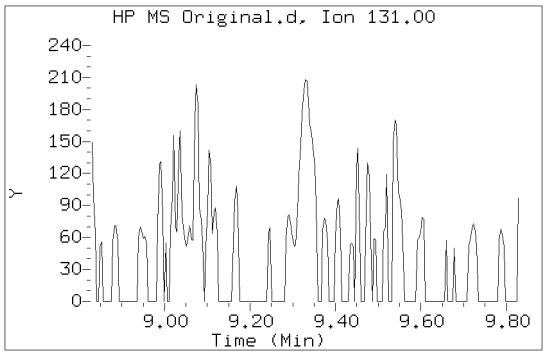
BEFORE
MASS
83
AREA
3564
HEIGHT
2413
01-Aug-2023
21:03



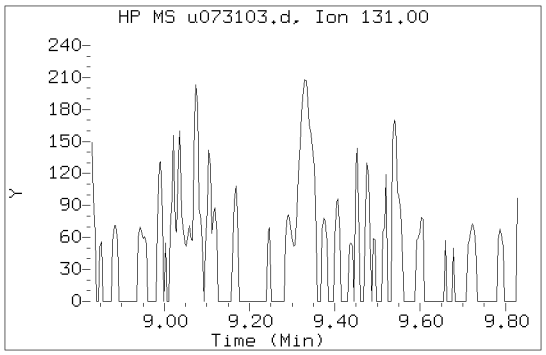
AFTER
MASS
83
AREA
3564
HEIGHT
2413
01-Aug-2023
21:03



BEFORE
MASS
131
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
131
AREA
0
HEIGHT
0
01-Aug-2023
21:03

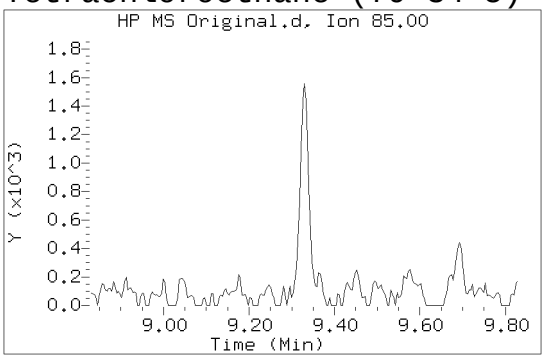


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

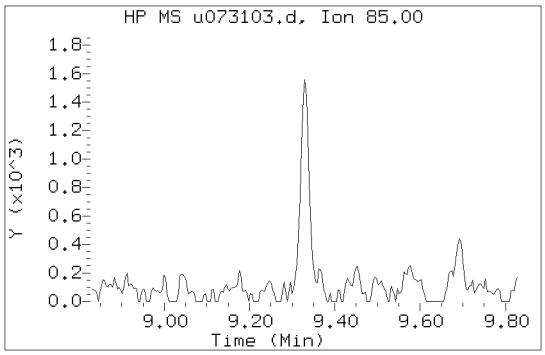
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03



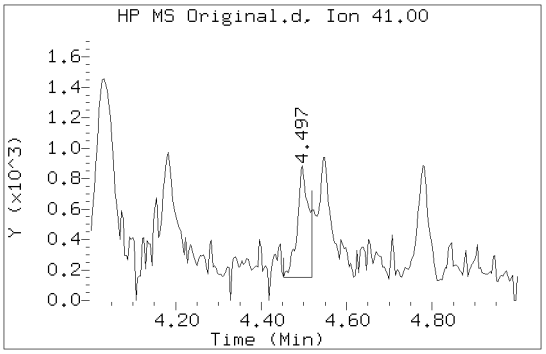
AFTER
MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03



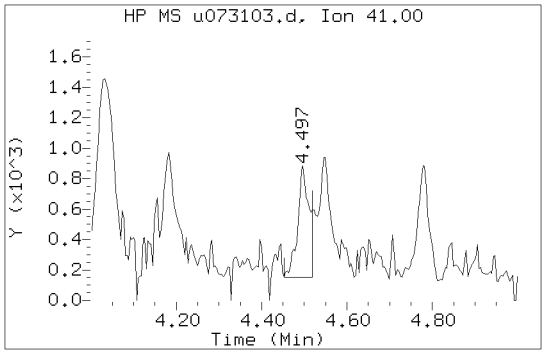
Methacrylonitrile (126-98-7)

Reason Code:

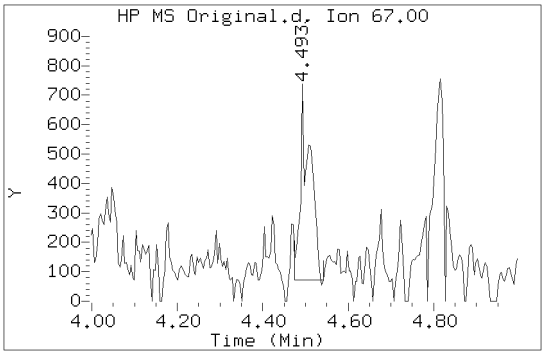
BEFORE
MASS
41
AREA
1418
HEIGHT
733
01-Aug-2023
21:03



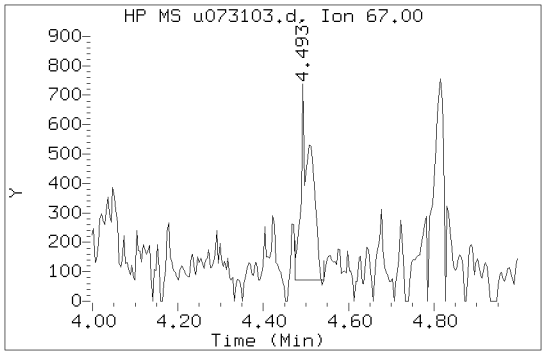
AFTER
MASS
41
AREA
1418
HEIGHT
733
01-Aug-2023
21:03



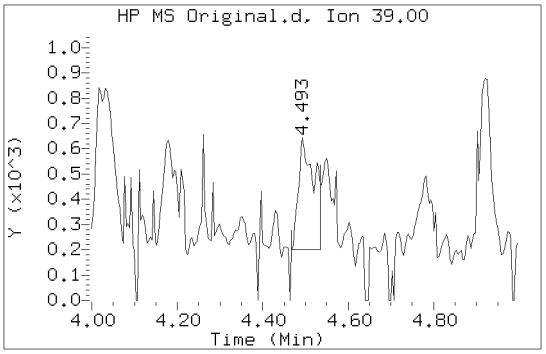
BEFORE
MASS
67
AREA
1064
HEIGHT
666
01-Aug-2023
21:03



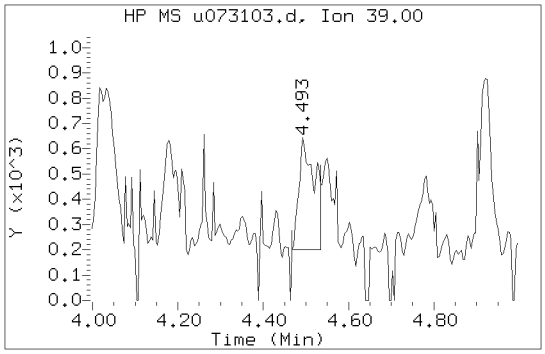
AFTER
MASS
67
AREA
1064
HEIGHT
666
01-Aug-2023
21:03



BEFORE
MASS
39
AREA
1145
HEIGHT
445
01-Aug-2023
21:03



AFTER
MASS
39
AREA
1145
HEIGHT
445
01-Aug-2023
21:03



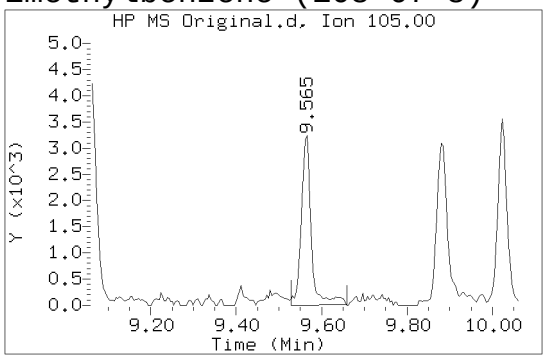
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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

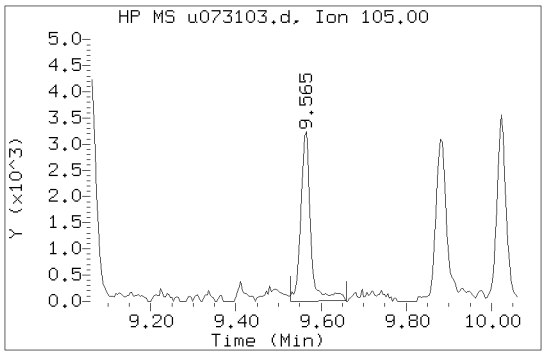
BEFORE

MASS
105
AREA
5406
HEIGHT
3241
01-Aug-2023
21:03



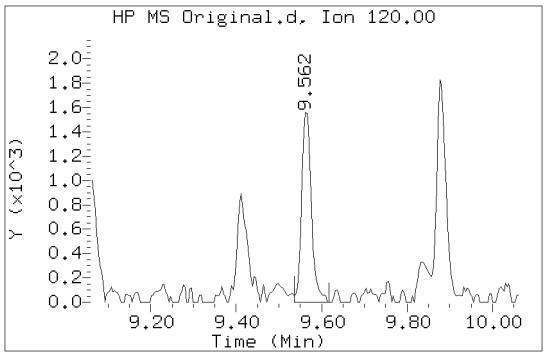
AFTER

MASS
105
AREA
5406
HEIGHT
3241
01-Aug-2023
21:03



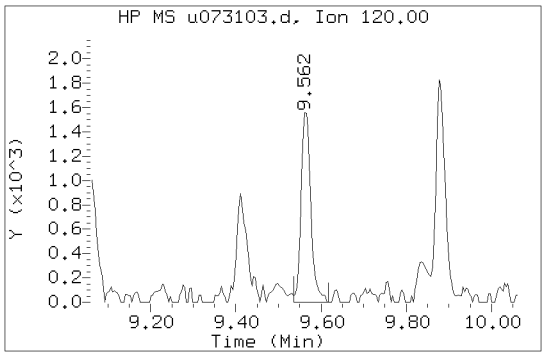
BEFORE

MASS
120
AREA
2560
HEIGHT
1560
01-Aug-2023
21:03



AFTER

MASS
120
AREA
2560
HEIGHT
1560
01-Aug-2023
21:03

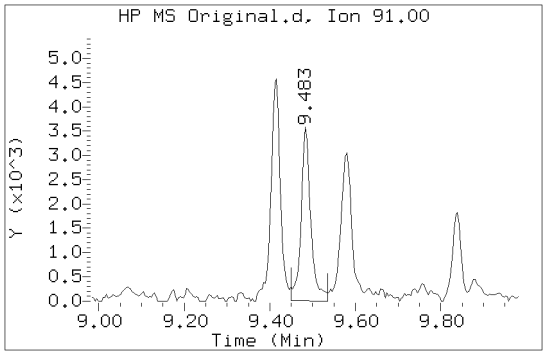


2-Chlorotoluene (95-49-8)

Reason Code:

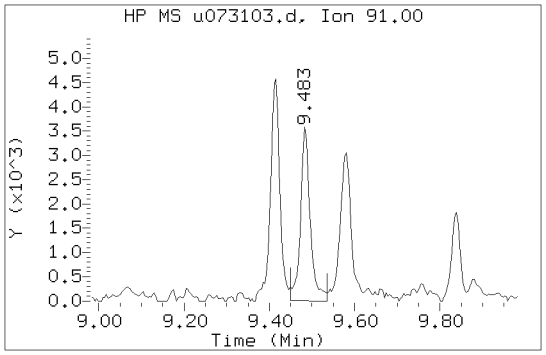
BEFORE

MASS
91
AREA
5806
HEIGHT
3580
01-Aug-2023
21:03



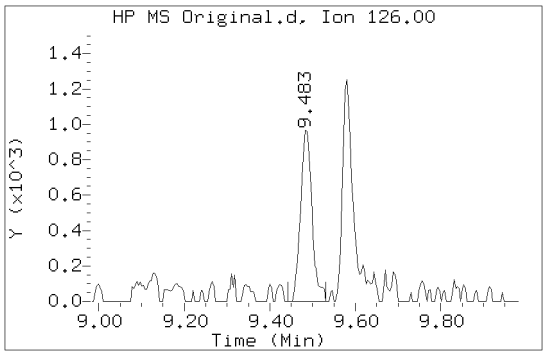
AFTER

MASS
91
AREA
5806
HEIGHT
3580
01-Aug-2023
21:03



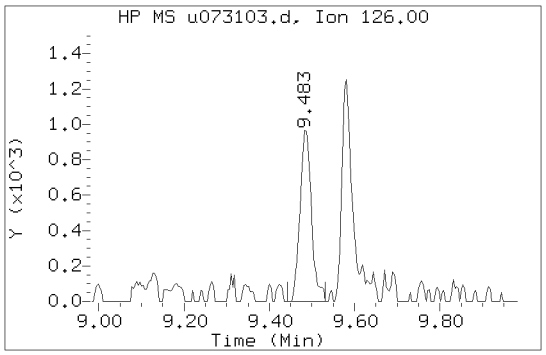
BEFORE

MASS
126
AREA
1848
HEIGHT
967
01-Aug-2023
21:03



AFTER

MASS
126
AREA
1848
HEIGHT
967
01-Aug-2023
21:03

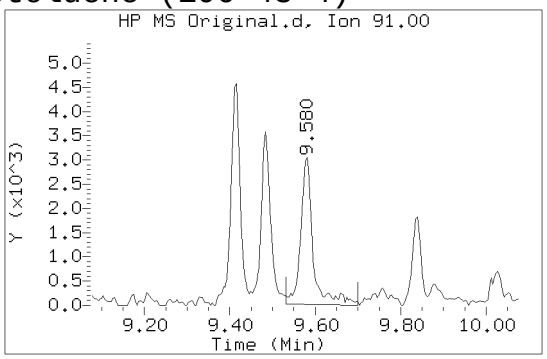


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

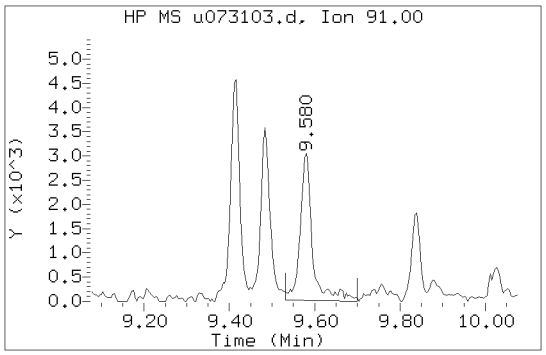
4-Chlorotoluene (106-43-4)

Reason Code:

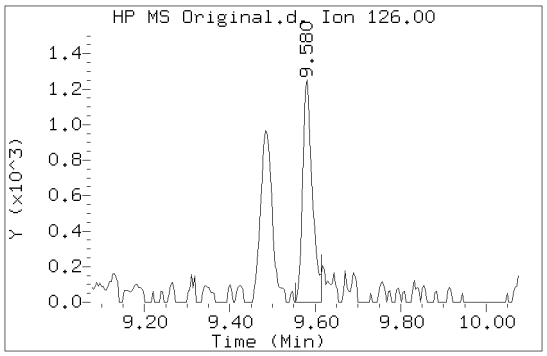
BEFORE
MASS
91
AREA
6267
HEIGHT
3039
01-Aug-2023
21:03



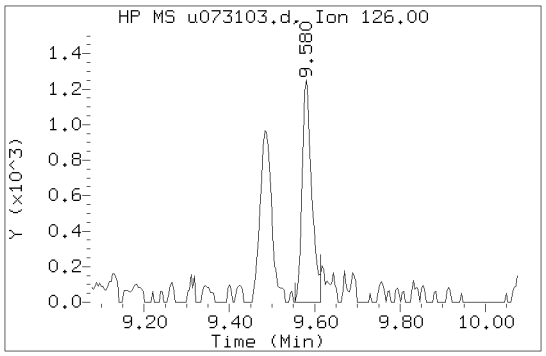
AFTER
MASS
91
AREA
6267
HEIGHT
3039
01-Aug-2023
21:03



BEFORE
MASS
126
AREA
2005
HEIGHT
1252
01-Aug-2023
21:03



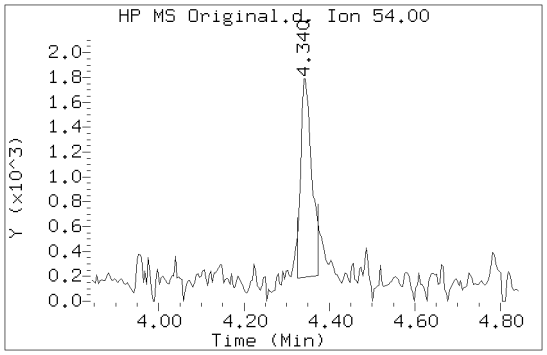
AFTER
MASS
126
AREA
2005
HEIGHT
1252
01-Aug-2023
21:03



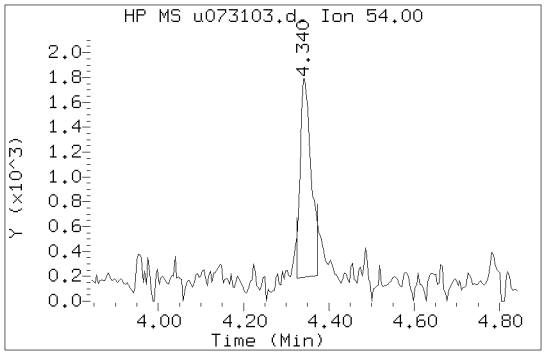
Propionitrile (107-12-0)

Reason Code:

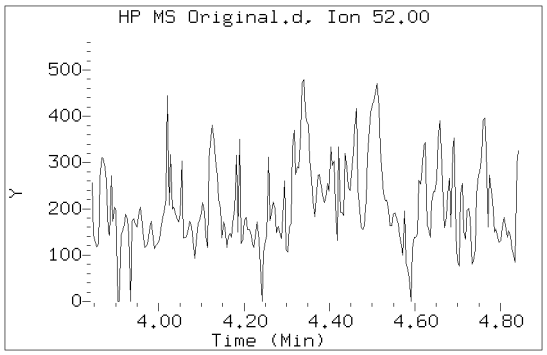
BEFORE
MASS
54
AREA
2962
HEIGHT
1596
01-Aug-2023
21:03



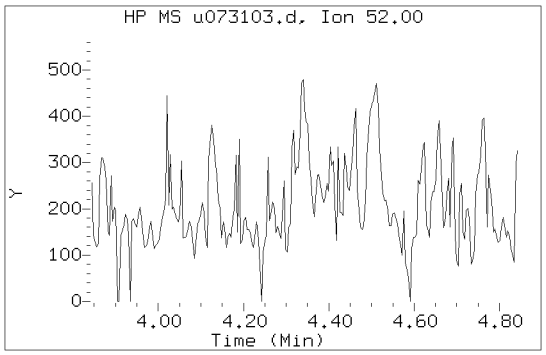
AFTER
MASS
54
AREA
2962
HEIGHT
1596
01-Aug-2023
21:03



BEFORE
MASS
52
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
52
AREA
0
HEIGHT
0
01-Aug-2023
21:03



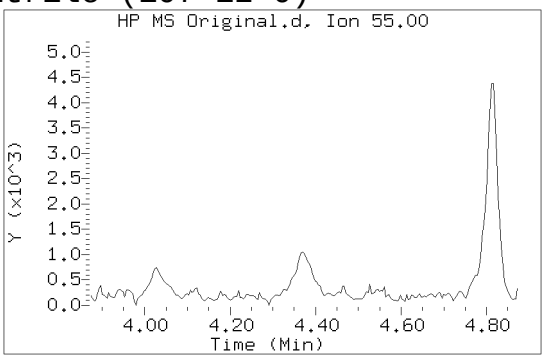
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Propionitrile (107-12-0)

Reason Code:

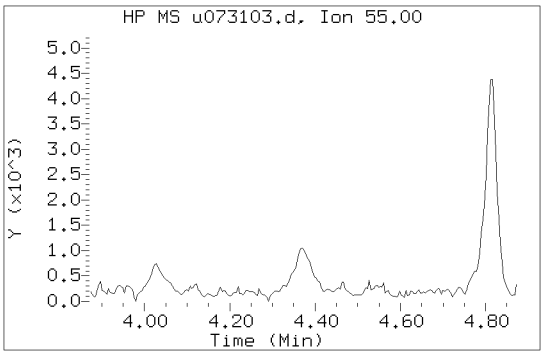
BEFORE

MASS
55
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
55
AREA
0
HEIGHT
0
01-Aug-2023
21:03

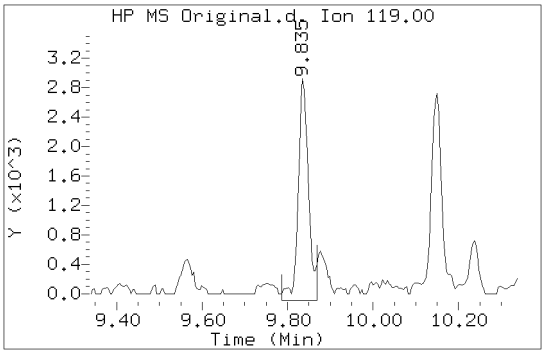


tert-Butylbenzene (98-06-6)

Reason Code:

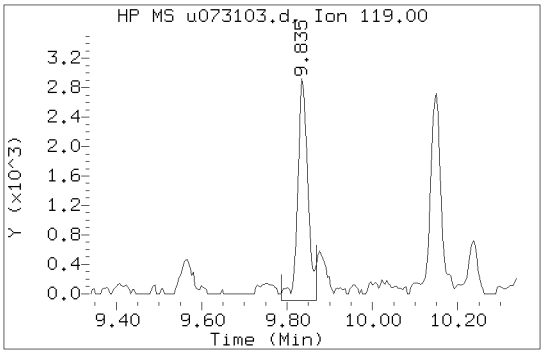
BEFORE

MASS
119
AREA
5184
HEIGHT
3013
01-Aug-2023
21:03



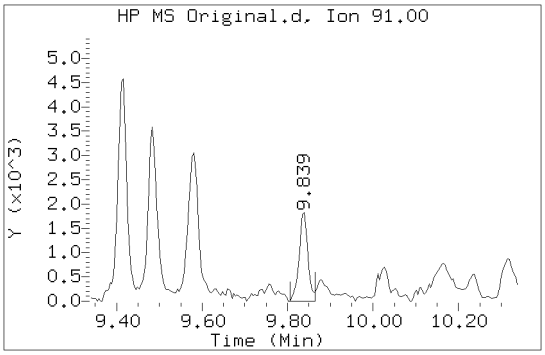
AFTER

MASS
119
AREA
5184
HEIGHT
3013
01-Aug-2023
21:03



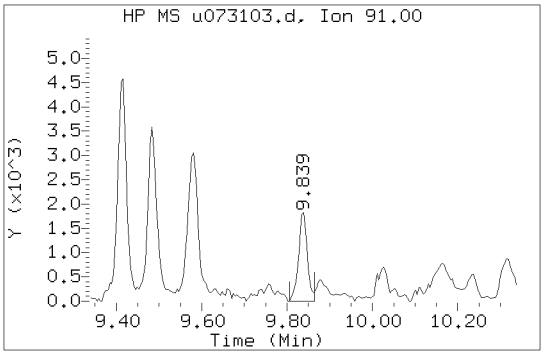
BEFORE

MASS
91
AREA
2701
HEIGHT
1823
01-Aug-2023
21:03



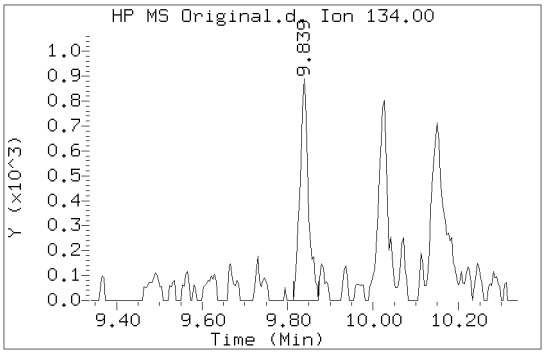
AFTER

MASS
91
AREA
2701
HEIGHT
1823
01-Aug-2023
21:03



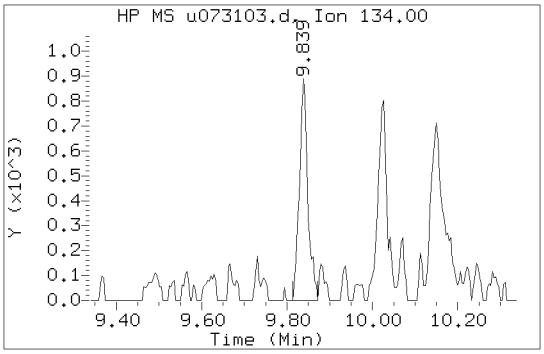
BEFORE

MASS
134
AREA
1244
HEIGHT
890
01-Aug-2023
21:03



AFTER

MASS
134
AREA
1244
HEIGHT
890
01-Aug-2023
21:03

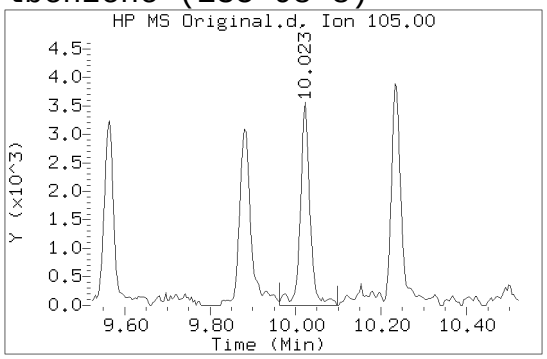


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

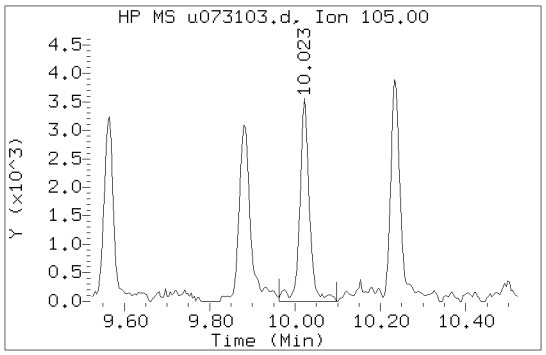
sec-Butylbenzene (135-98-8)

Reason Code:

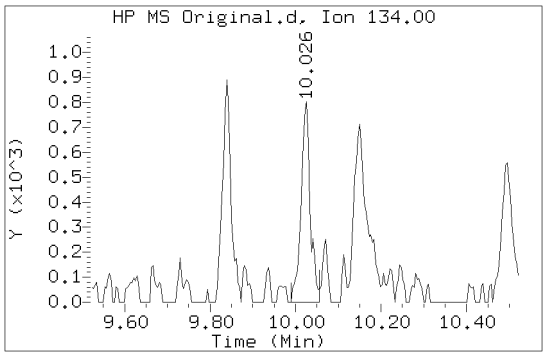
BEFORE
MASS
105
AREA
5696
HEIGHT
3563
01-Aug-2023
21:03



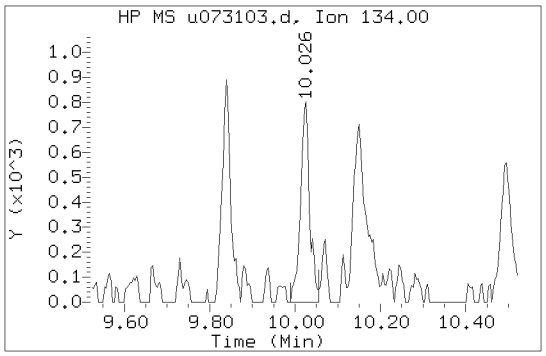
AFTER
MASS
105
AREA
5696
HEIGHT
3563
01-Aug-2023
21:03



BEFORE
MASS
134
AREA
1229
HEIGHT
803
01-Aug-2023
21:03



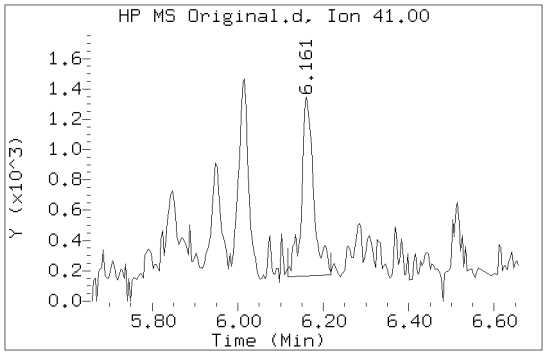
AFTER
MASS
134
AREA
1229
HEIGHT
803
01-Aug-2023
21:03



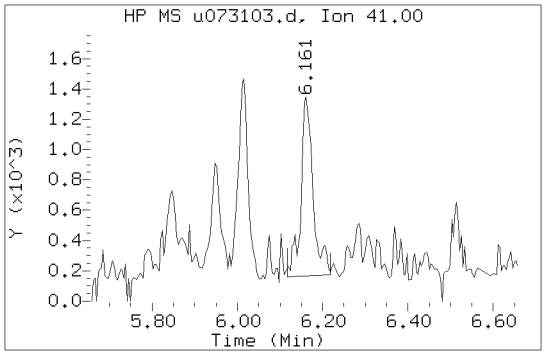
Methyl Methacrylate (80-62-6)

Reason Code:

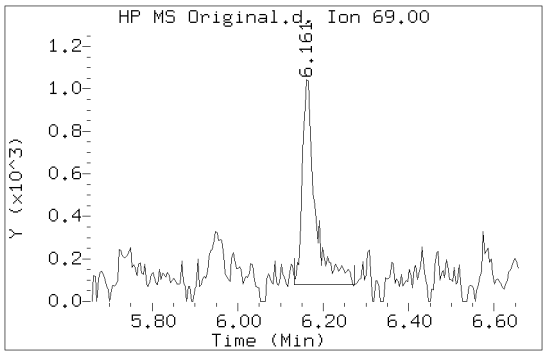
BEFORE
MASS
41
AREA
2378
HEIGHT
1183
01-Aug-2023
21:03



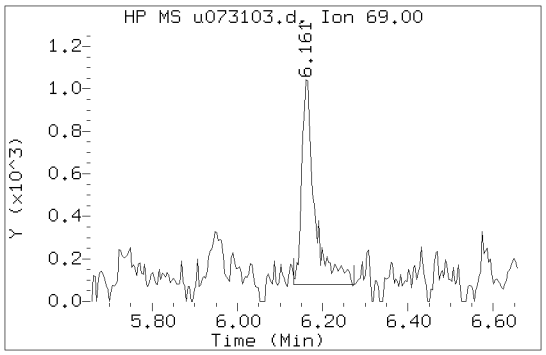
AFTER
MASS
41
AREA
2378
HEIGHT
1183
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
2078
HEIGHT
966
01-Aug-2023
21:03



AFTER
MASS
69
AREA
2078
HEIGHT
966
01-Aug-2023
21:03

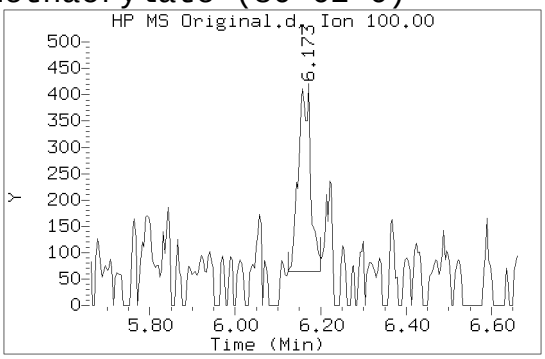


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

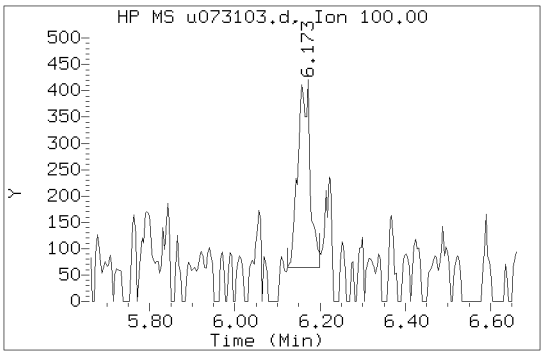
Methyl Methacrylate (80-62-6)

Reason Code:

BEFORE
MASS
100
AREA
711
HEIGHT
357
01-Aug-2023
21:03



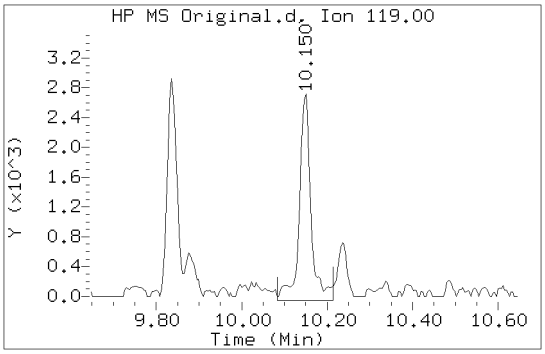
AFTER
MASS
100
AREA
711
HEIGHT
357
01-Aug-2023
21:03



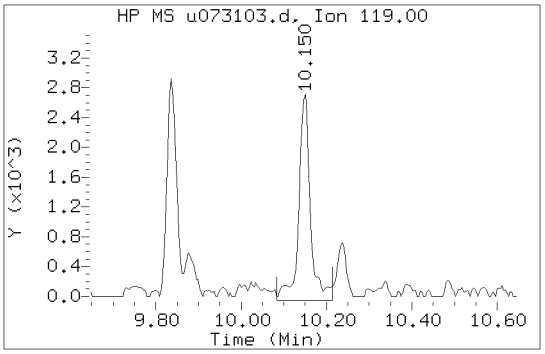
p-Isopropyltoluene (99-87-6)

Reason Code:

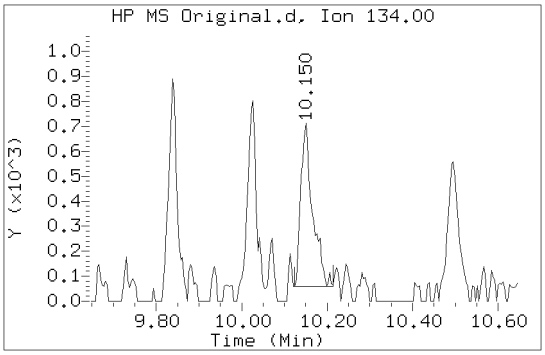
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AREA
5403
HEIGHT
2774
01-Aug-2023
21:03



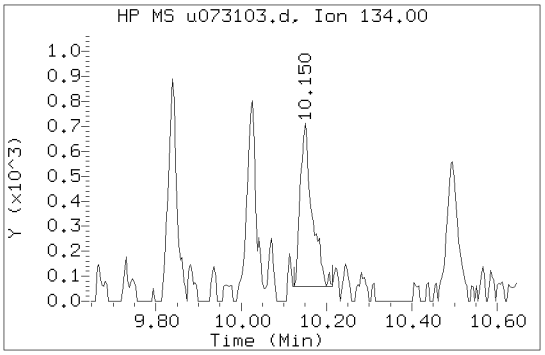
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5403
HEIGHT
2774
01-Aug-2023
21:03



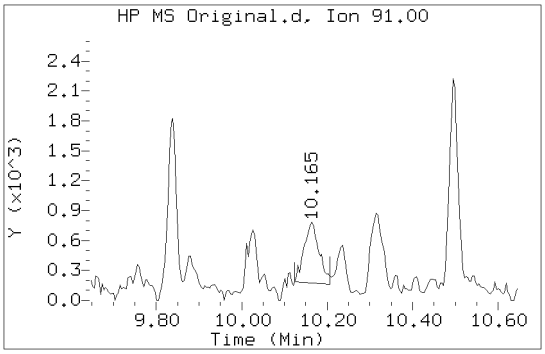
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MASS
134
AREA
1271
HEIGHT
652
01-Aug-2023
21:03



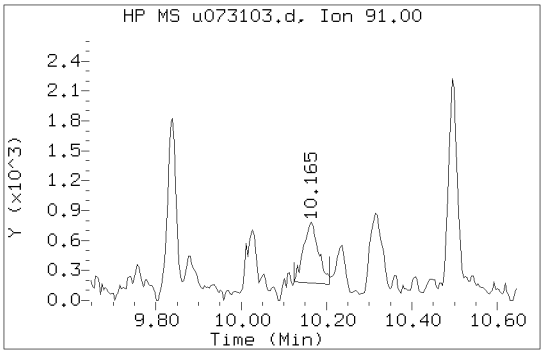
AFTER
MASS
134
AREA
1271
HEIGHT
652
01-Aug-2023
21:03



BEFORE
MASS
91
AREA
1511
HEIGHT
612
01-Aug-2023
21:03



AFTER
MASS
91
AREA
1511
HEIGHT
612
01-Aug-2023
21:03

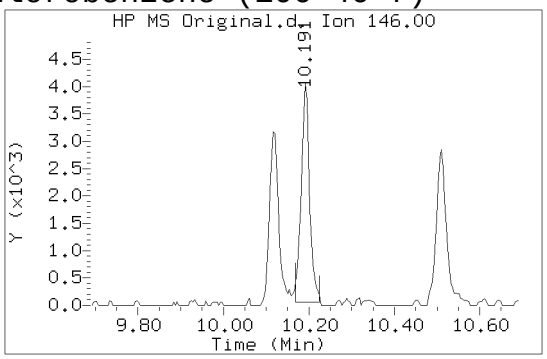


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InstruID : VOA9.i
LabSampID : VSTD000.5

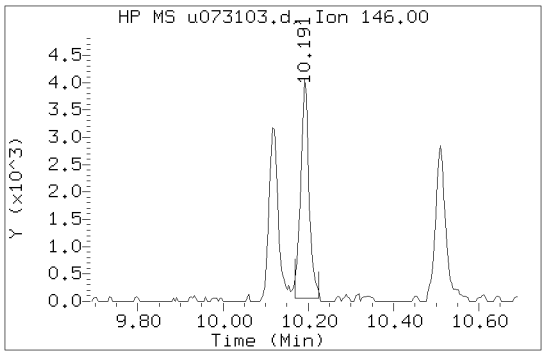
1,4-Dichlorobenzene (106-46-7)

Reason Code:

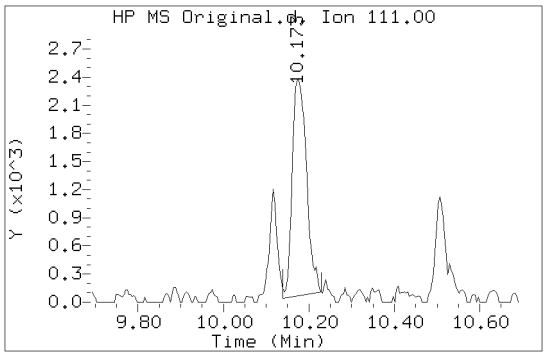
BEFORE
MASS
146
AREA
5577
HEIGHT
3993
01-Aug-2023
21:03



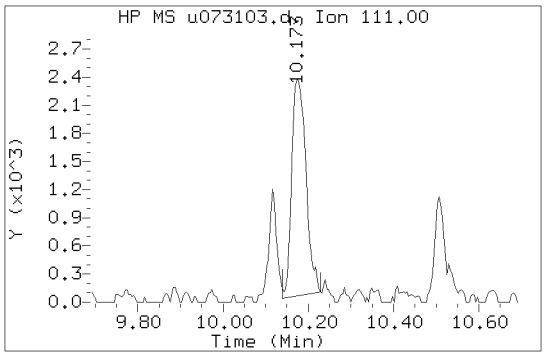
AFTER
MASS
146
AREA
5577
HEIGHT
3993
01-Aug-2023
21:03



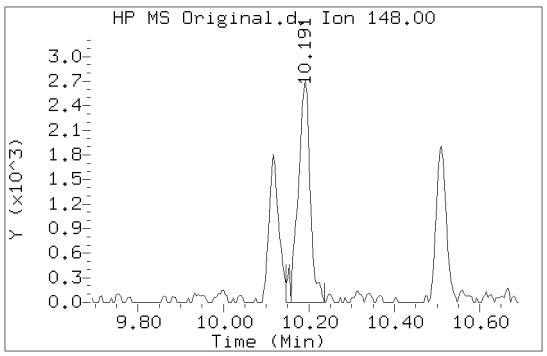
BEFORE
MASS
111
AREA
5405
HEIGHT
2302
01-Aug-2023
21:03



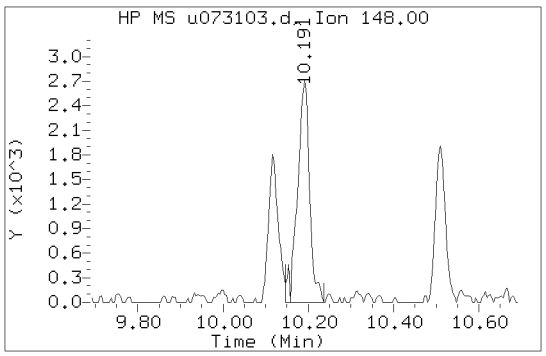
AFTER
MASS
111
AREA
5405
HEIGHT
2302
01-Aug-2023
21:03



BEFORE
MASS
148
AREA
5464
HEIGHT
2706
01-Aug-2023
21:03



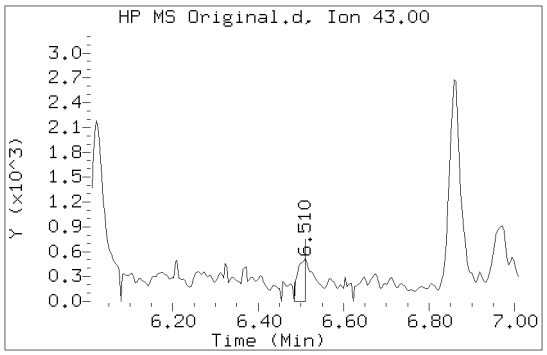
AFTER
MASS
148
AREA
5464
HEIGHT
2706
01-Aug-2023
21:03



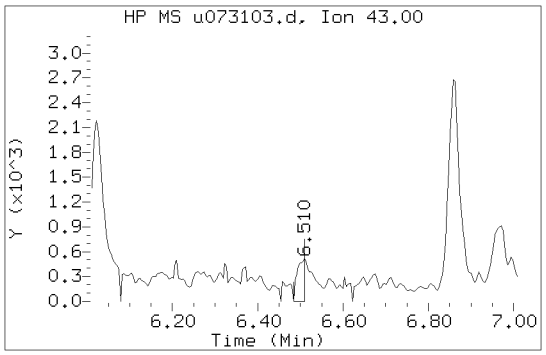
2-Nitropropane (79-46-9)

Reason Code:

BEFORE
MASS
43
AREA
661
HEIGHT
517
01-Aug-2023
21:03



AFTER
MASS
43
AREA
661
HEIGHT
517
01-Aug-2023
21:03



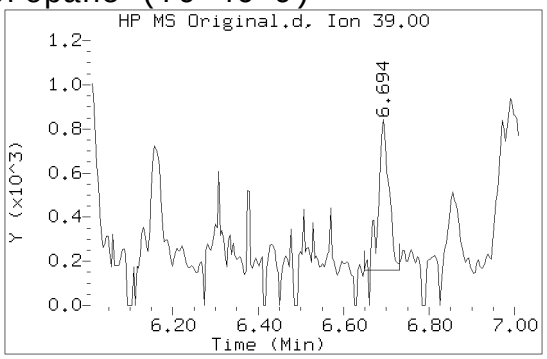
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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

2-Nitropropane (79-46-9)

Reason Code:

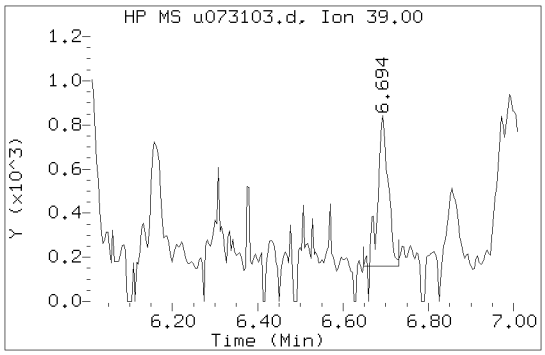
BEFORE

MASS
39
AREA
1143
HEIGHT
683
01-Aug-2023
21:03



AFTER

MASS
39
AREA
1143
HEIGHT
683
01-Aug-2023
21:03

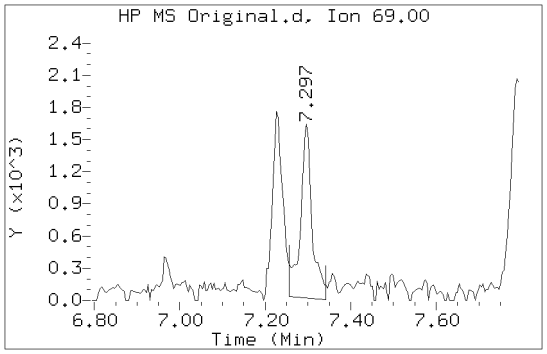


Ethyl Methacrylate (97-63-2)

Reason Code:

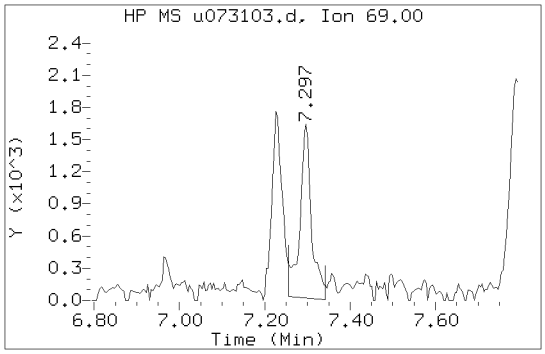
BEFORE

MASS
69
AREA
3176
HEIGHT
1621
01-Aug-2023
21:03



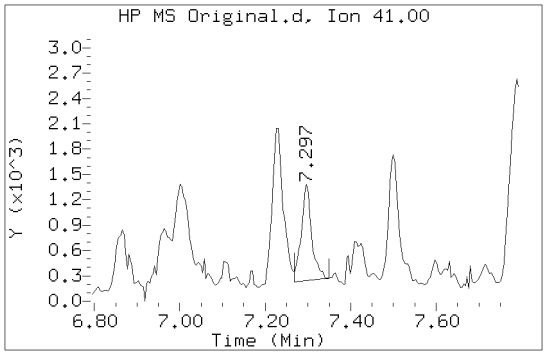
AFTER

MASS
69
AREA
3176
HEIGHT
1621
01-Aug-2023
21:03



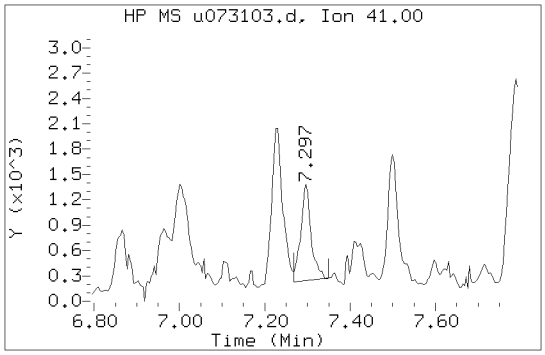
BEFORE

MASS
41
AREA
1981
HEIGHT
1135
01-Aug-2023
21:03



AFTER

MASS
41
AREA
1981
HEIGHT
1135
01-Aug-2023
21:03

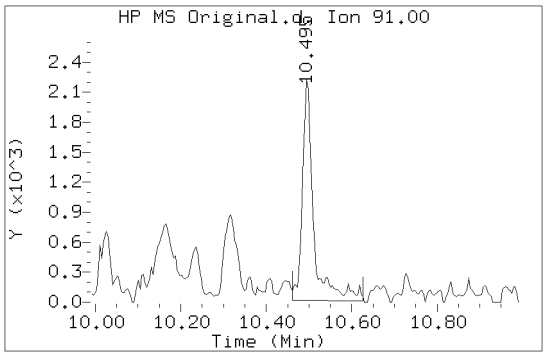


n-Butylbenzene (104-51-8)

Reason Code:

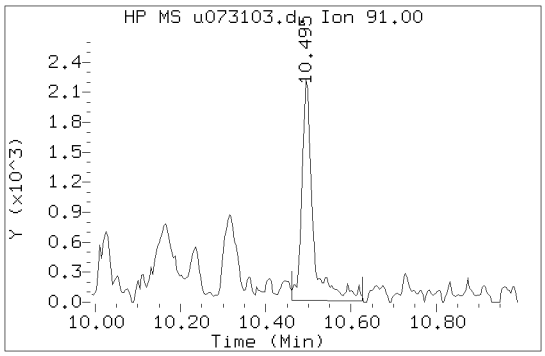
BEFORE

MASS
91
AREA
4114
HEIGHT
2205
01-Aug-2023
21:03



AFTER

MASS
91
AREA
4114
HEIGHT
2205
01-Aug-2023
21:03

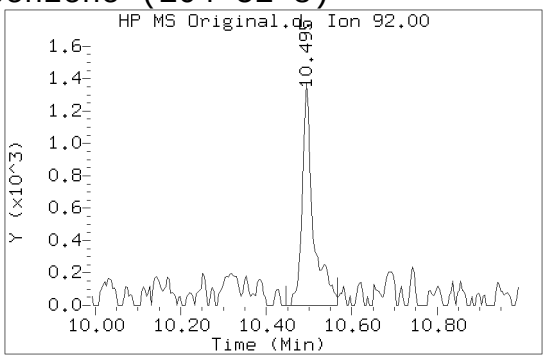


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LabSampID : VSTD000.5

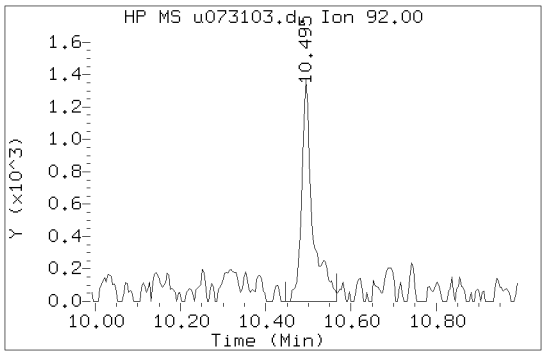
n-Butylbenzene (104-51-8)

Reason Code:

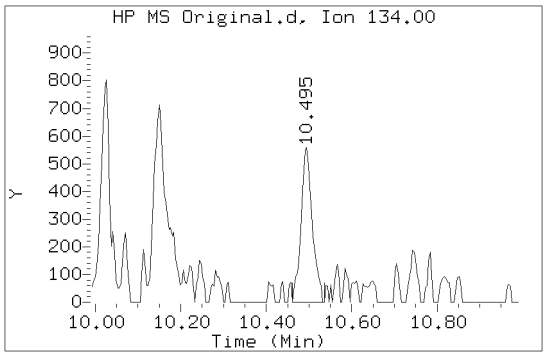
BEFORE
MASS
92
AREA
2489
HEIGHT
1369
01-Aug-2023
21:03



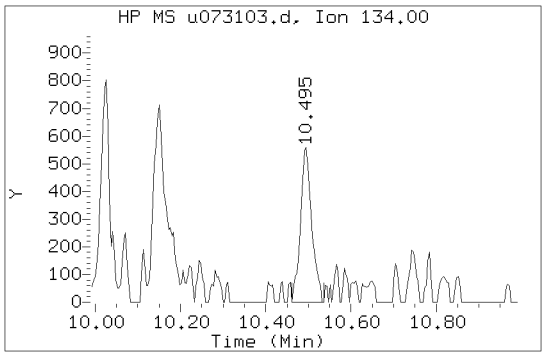
AFTER
MASS
92
AREA
2489
HEIGHT
1369
01-Aug-2023
21:03



BEFORE
MASS
134
AREA
1039
HEIGHT
559
01-Aug-2023
21:03



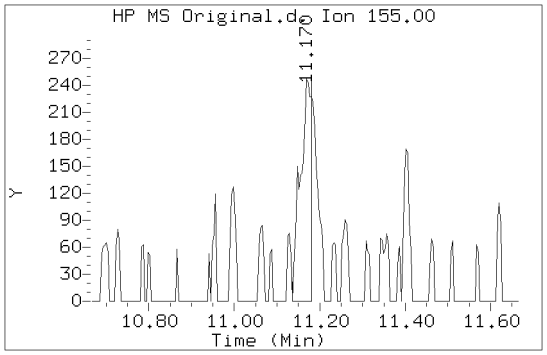
AFTER
MASS
134
AREA
1039
HEIGHT
559
01-Aug-2023
21:03



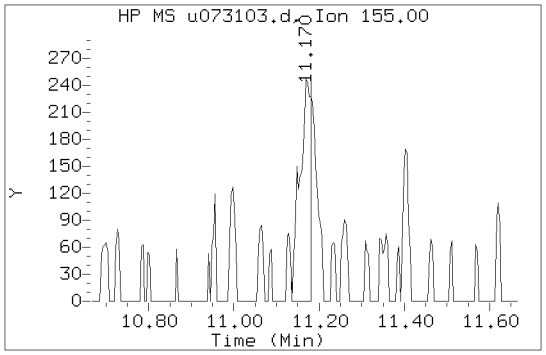
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

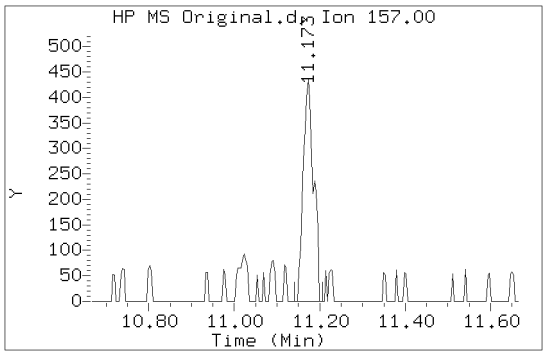
BEFORE
MASS
155
AREA
447
HEIGHT
247
01-Aug-2023
21:03



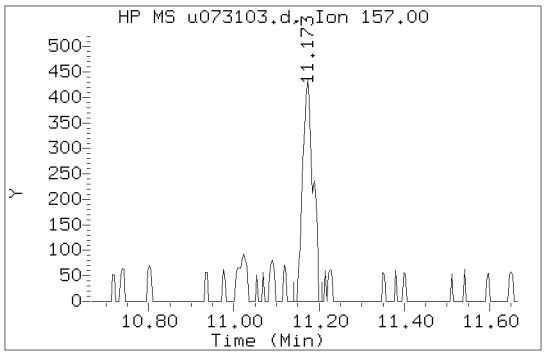
AFTER
MASS
155
AREA
447
HEIGHT
247
01-Aug-2023
21:03



BEFORE
MASS
157
AREA
739
HEIGHT
435
01-Aug-2023
21:03



AFTER
MASS
157
AREA
739
HEIGHT
435
01-Aug-2023
21:03

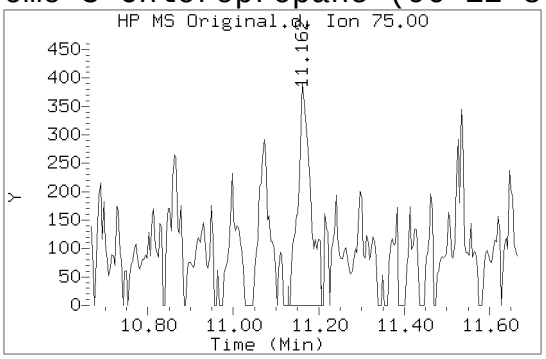


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LabSampID : VSTD000.5

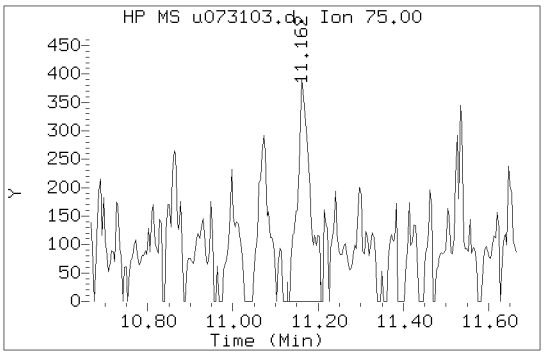
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE
MASS
75
AREA
826
HEIGHT
390
01-Aug-2023
21:03



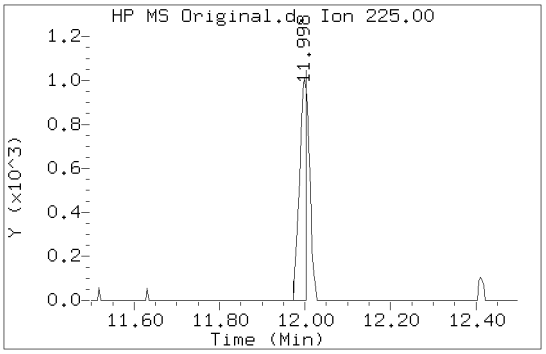
AFTER
MASS
75
AREA
826
HEIGHT
390
01-Aug-2023
21:03



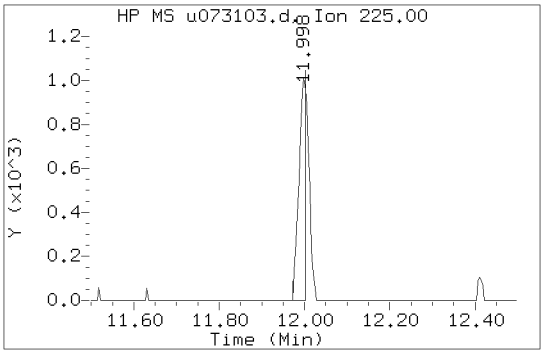
Hexachlorobutadiene (87-68-3)

Reason Code:

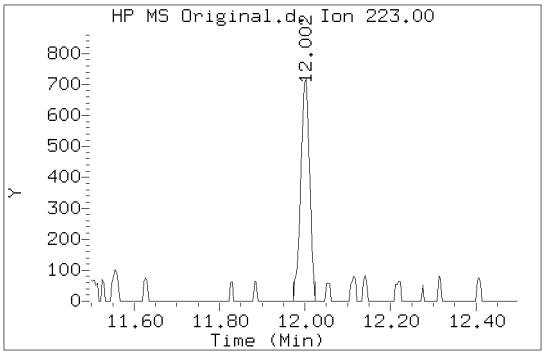
BEFORE
MASS
225
AREA
1126
HEIGHT
1008
01-Aug-2023
21:03



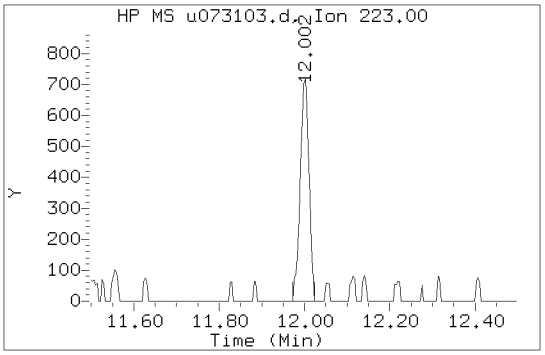
AFTER
MASS
225
AREA
1126
HEIGHT
1008
01-Aug-2023
21:03



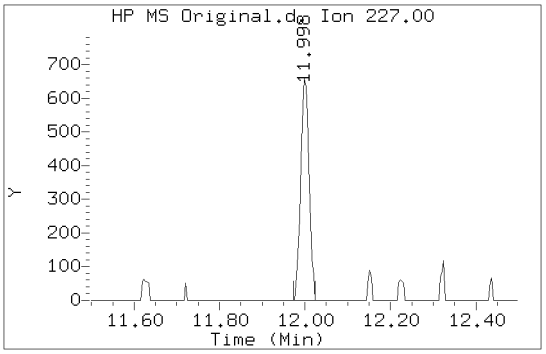
BEFORE
MASS
223
AREA
1061
HEIGHT
718
01-Aug-2023
21:03



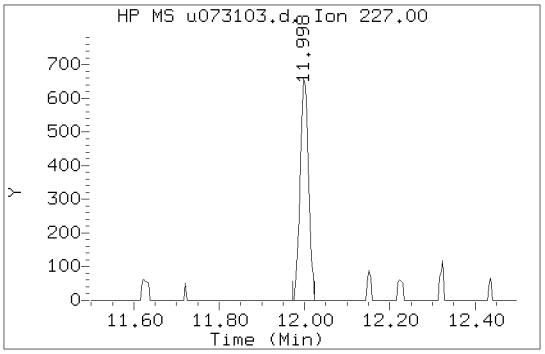
AFTER
MASS
223
AREA
1061
HEIGHT
718
01-Aug-2023
21:03



BEFORE
MASS
227
AREA
926
HEIGHT
658
01-Aug-2023
21:03



AFTER
MASS
227
AREA
926
HEIGHT
658
01-Aug-2023
21:03

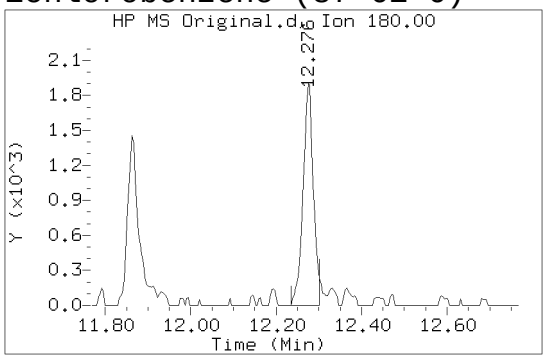


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InstruID : VOA9.i
LabSampID : VSTD000.5

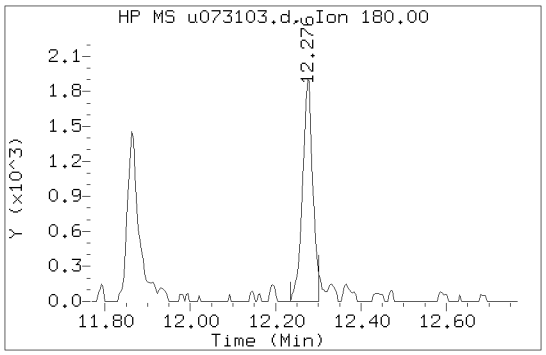
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

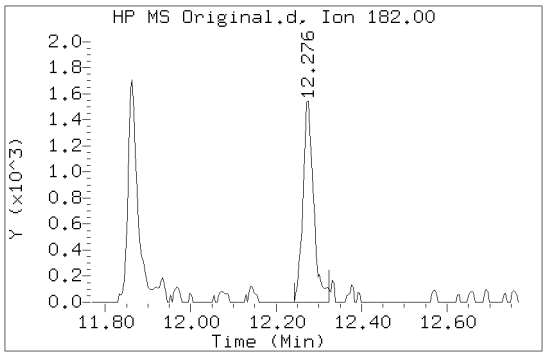
BEFORE
MASS
180
AREA
3219
HEIGHT
1900
01-Aug-2023
21:03



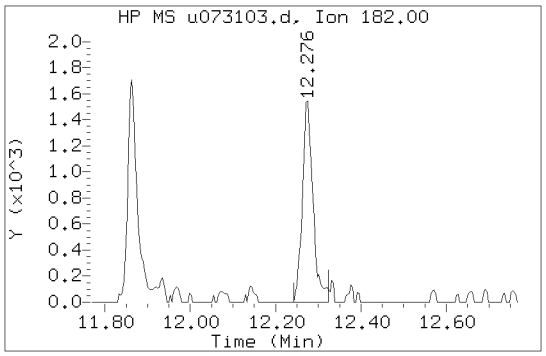
AFTER
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180
AREA
3219
HEIGHT
1900
01-Aug-2023
21:03



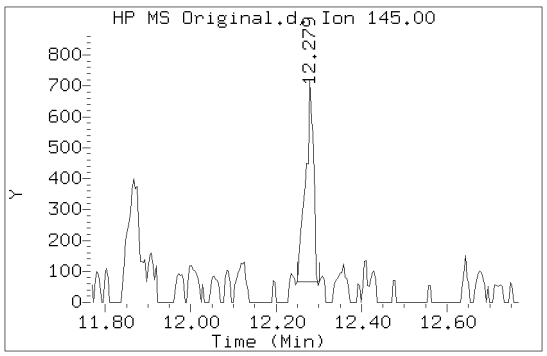
BEFORE
MASS
182
AREA
2714
HEIGHT
1545
01-Aug-2023
21:03



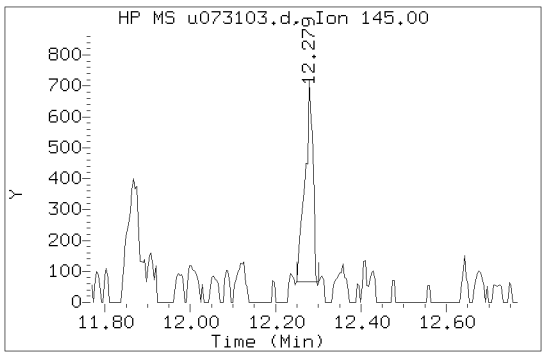
AFTER
MASS
182
AREA
2714
HEIGHT
1545
01-Aug-2023
21:03



BEFORE
MASS
145
AREA
836
HEIGHT
650
01-Aug-2023
21:03



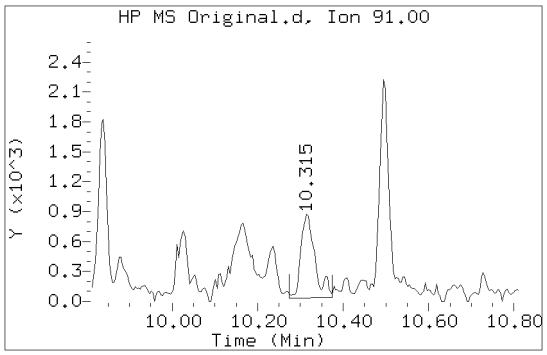
AFTER
MASS
145
AREA
836
HEIGHT
650
01-Aug-2023
21:03



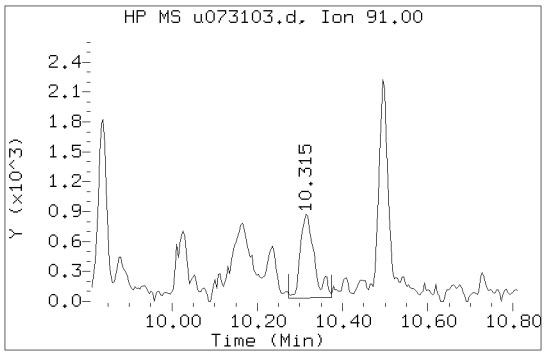
Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
1941
HEIGHT
838
01-Aug-2023
21:03



AFTER
MASS
91
AREA
1941
HEIGHT
838
01-Aug-2023
21:03

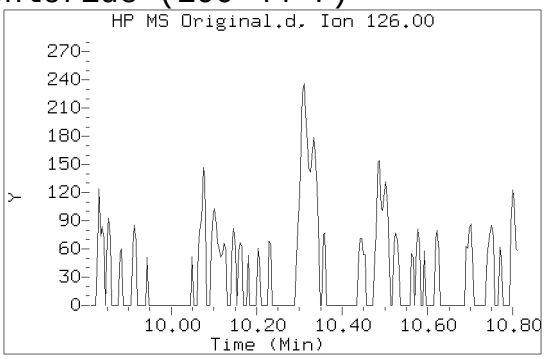


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InstruID : VOA9.i
LabSampID : VSTD000.5

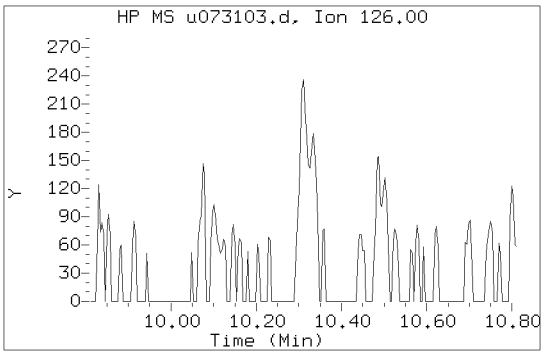
Benzyl Chloride (100-44-7)

Reason Code:

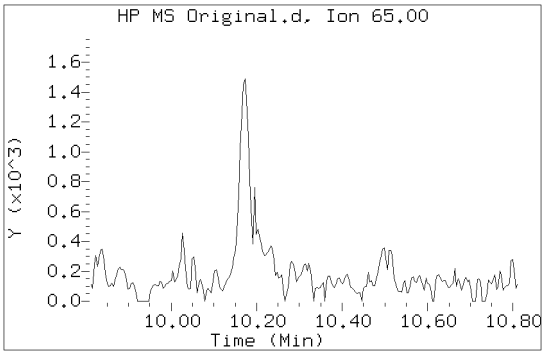
BEFORE
MASS
126
AREA
0
HEIGHT
0
01-Aug-2023
21:03



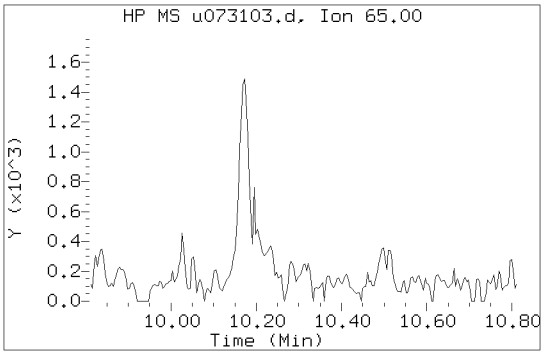
AFTER
MASS
126
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



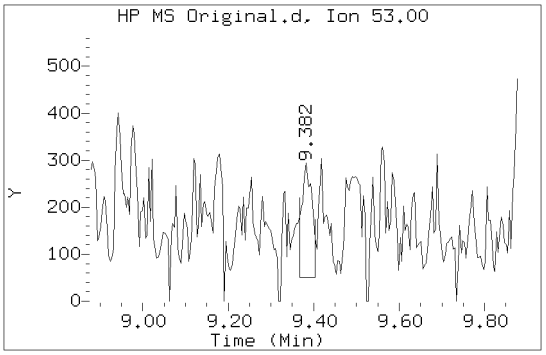
AFTER
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



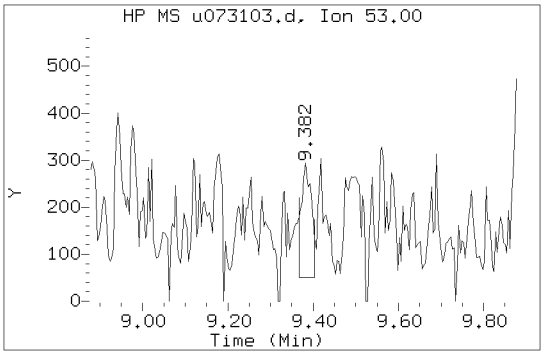
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

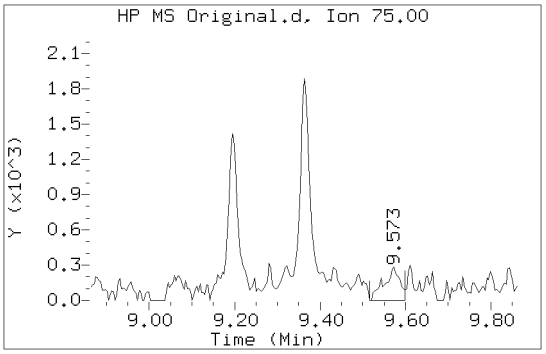
BEFORE
MASS
53
AREA
422
HEIGHT
243
01-Aug-2023
21:03



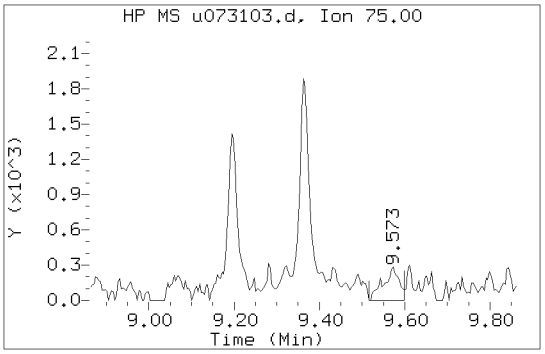
AFTER
MASS
53
AREA
422
HEIGHT
243
01-Aug-2023
21:03



BEFORE
MASS
75
AREA
722
HEIGHT
284
01-Aug-2023
21:03



AFTER
MASS
75
AREA
722
HEIGHT
284
01-Aug-2023
21:03

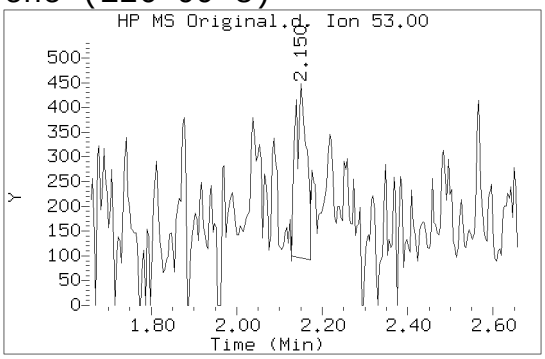


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InstruID : VOA9.i
LabSampID : VSTD000.5

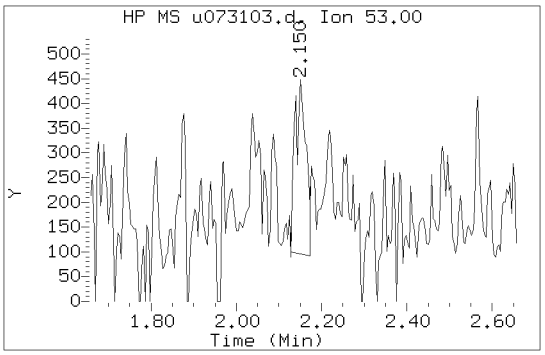
Chloroprene (126-99-8)

Reason Code:

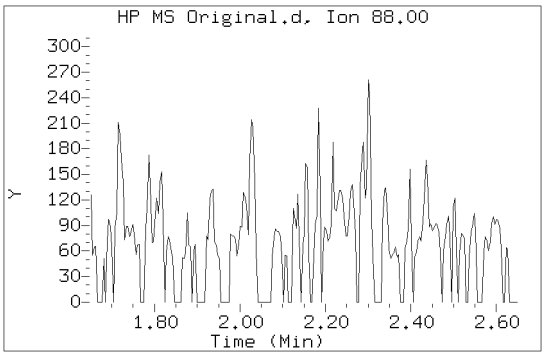
BEFORE
MASS
53
AREA
645
HEIGHT
352
01-Aug-2023
21:03



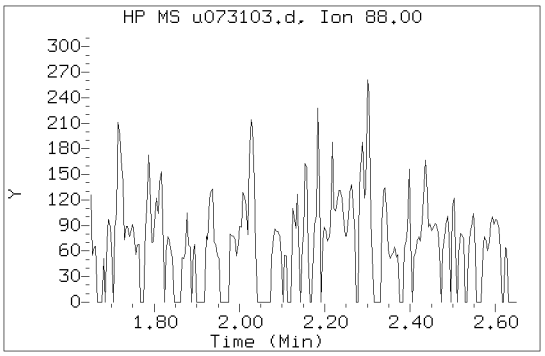
AFTER
MASS
53
AREA
645
HEIGHT
352
01-Aug-2023
21:03



BEFORE
MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



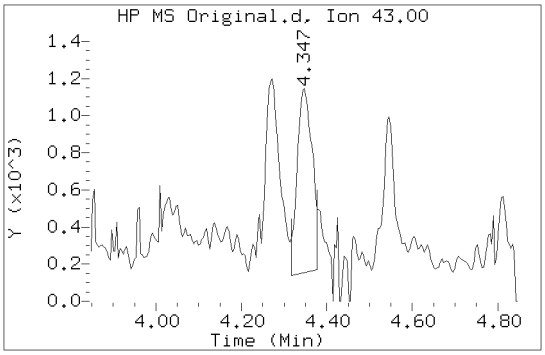
AFTER
MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



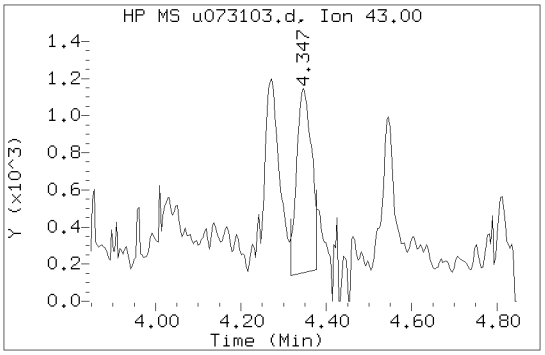
Ethyl Acetate (141-78-6)

Reason Code:

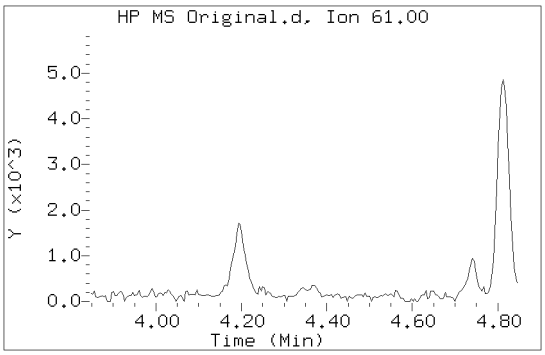
BEFORE
MASS
43
AREA
2477
HEIGHT
989
01-Aug-2023
21:03



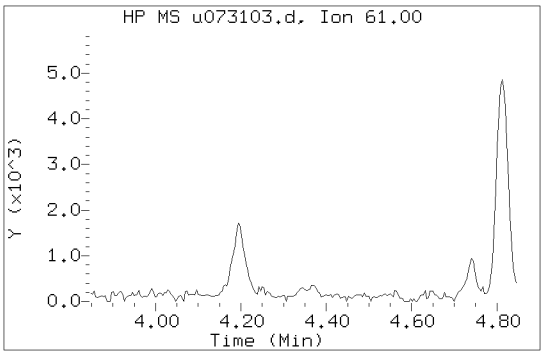
AFTER
MASS
43
AREA
2477
HEIGHT
989
01-Aug-2023
21:03



BEFORE
MASS
61
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
61
AREA
0
HEIGHT
0
01-Aug-2023
21:03

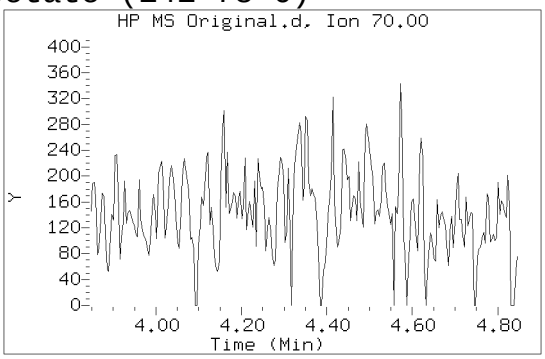


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Ethyl Acetate (141-78-6)

BEFORE

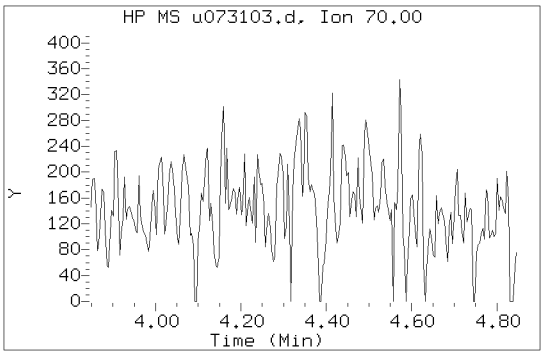
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



Reason Code:

AFTER

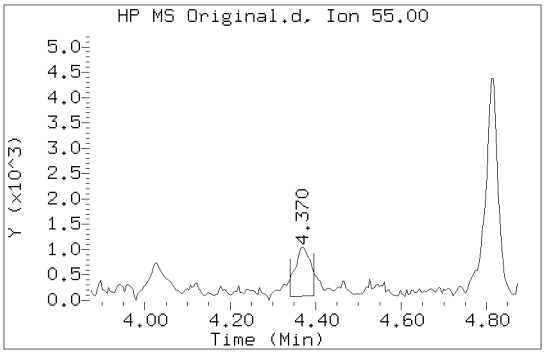
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



Methyl Acrylate (96-33-3)

BEFORE

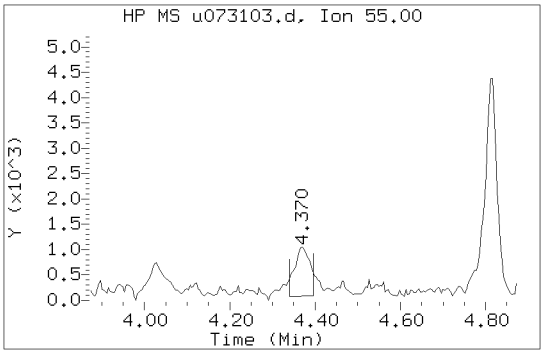
MASS
55
AREA
2472
HEIGHT
970
01-Aug-2023
21:03



Reason Code:

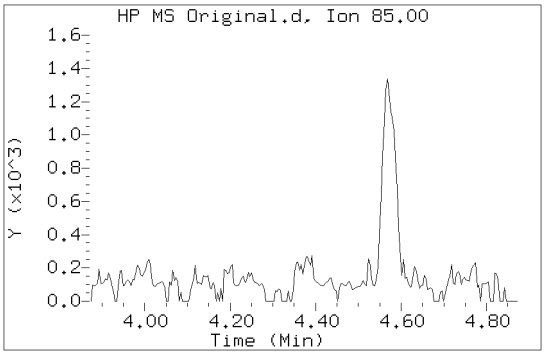
AFTER

MASS
55
AREA
2472
HEIGHT
970
01-Aug-2023
21:03



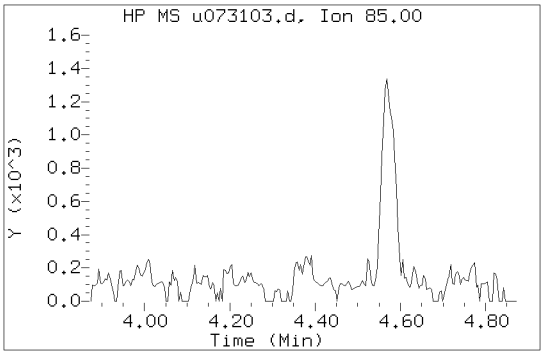
BEFORE

MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03

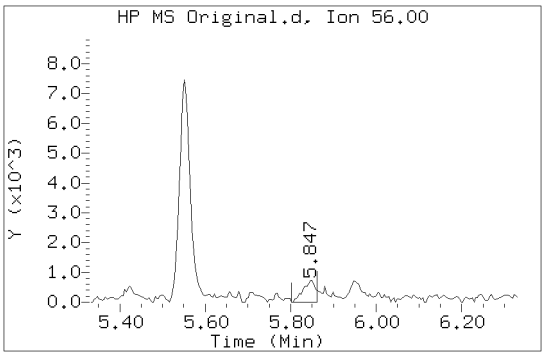


n-Butanol (71-36-3)

Reason Code:

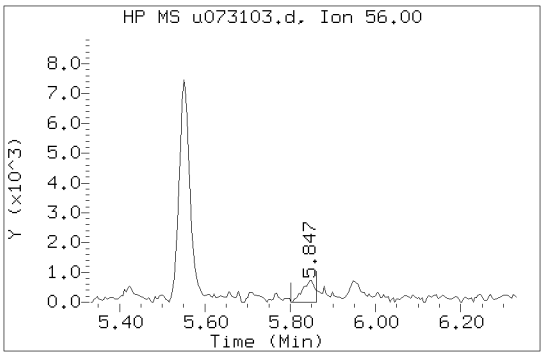
BEFORE

MASS
56
AREA
1456
HEIGHT
725
01-Aug-2023
21:03



AFTER

MASS
56
AREA
1456
HEIGHT
725
01-Aug-2023
21:03



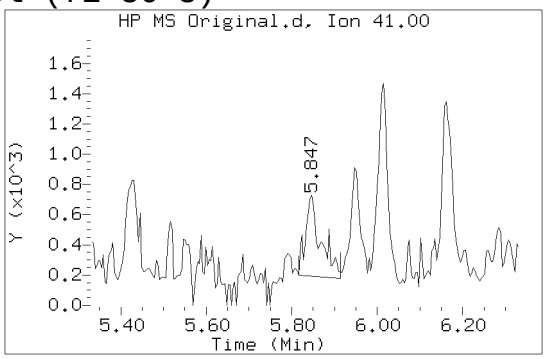
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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

n-Butanol (71-36-3)

Reason Code:

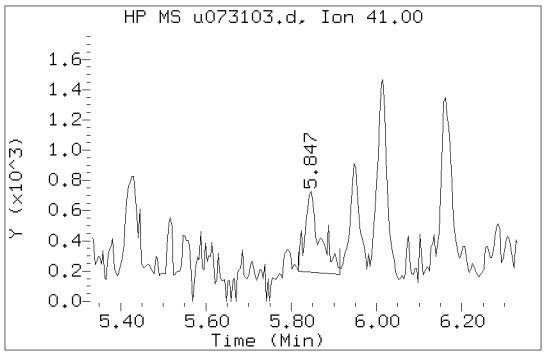
BEFORE

MASS
41
AREA
1328
HEIGHT
535
01-Aug-2023
21:03



AFTER

MASS
41
AREA
1328
HEIGHT
535
01-Aug-2023
21:03

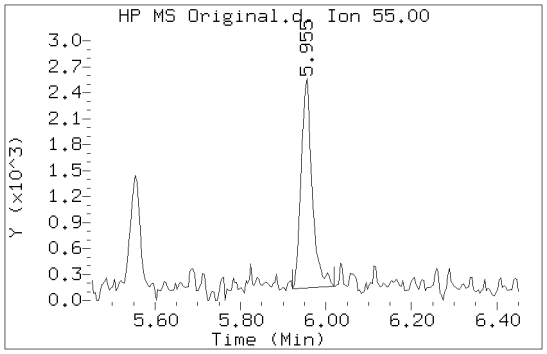


Ethyl Acrylate (140-88-5)

Reason Code:

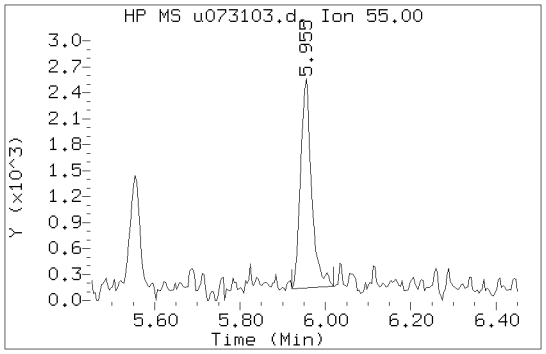
BEFORE

MASS
55
AREA
4410
HEIGHT
2418
01-Aug-2023
21:03



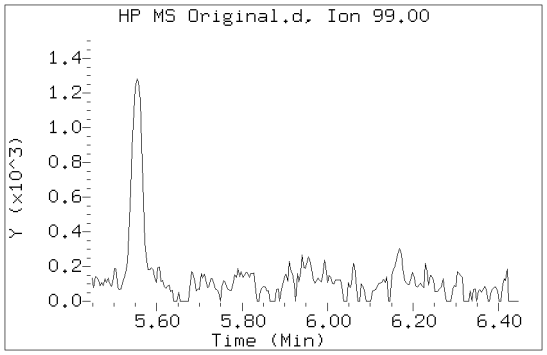
AFTER

MASS
55
AREA
4410
HEIGHT
2418
01-Aug-2023
21:03



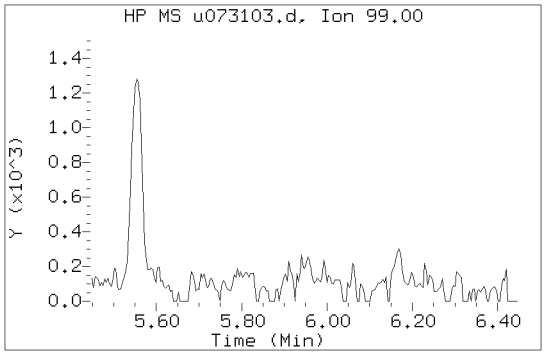
BEFORE

MASS
99
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
99
AREA
0
HEIGHT
0
01-Aug-2023
21:03

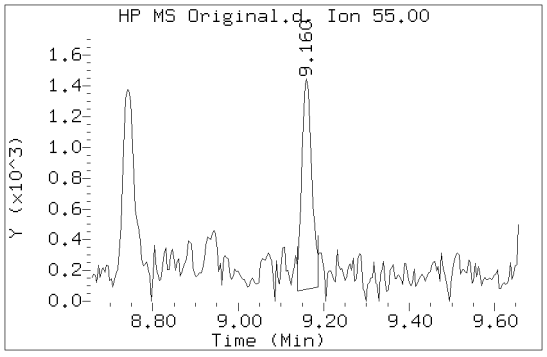


Cyclohexanone (108-94-1)

Reason Code:

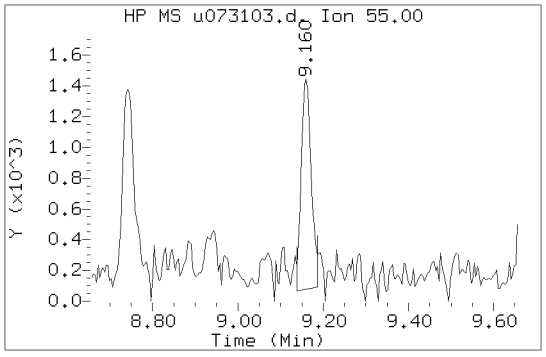
BEFORE

MASS
55
AREA
2325
HEIGHT
1368
01-Aug-2023
21:03



AFTER

MASS
55
AREA
2325
HEIGHT
1368
01-Aug-2023
21:03

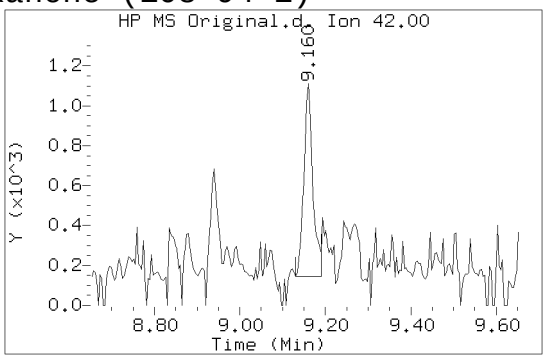


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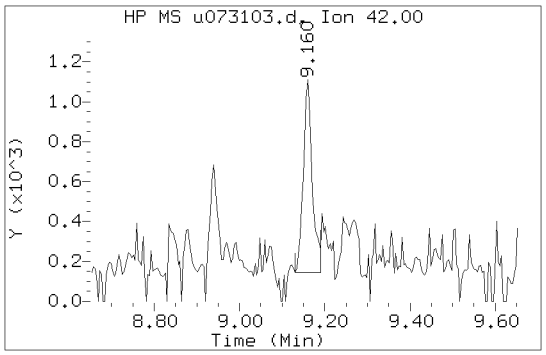
Cyclohexanone (108-94-1)

Reason Code:

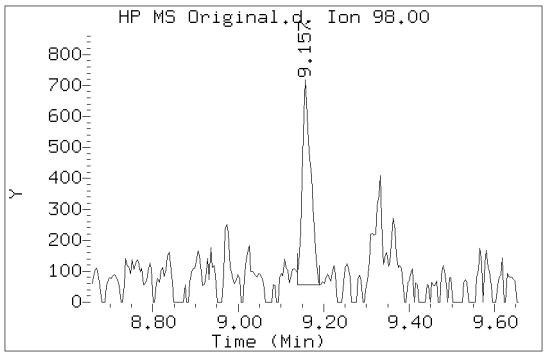
BEFORE
MASS
42
AREA
1432
HEIGHT
965
01-Aug-2023
21:03



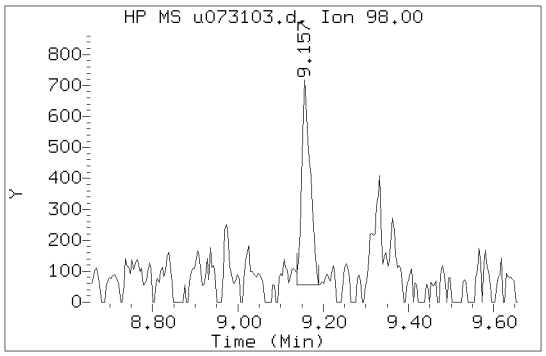
AFTER
MASS
42
AREA
1432
HEIGHT
965
01-Aug-2023
21:03



BEFORE
MASS
98
AREA
938
HEIGHT
662
01-Aug-2023
21:03



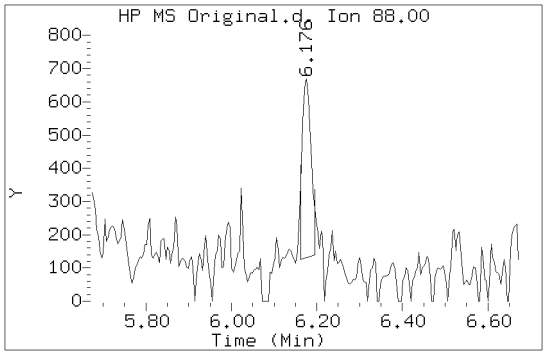
AFTER
MASS
98
AREA
938
HEIGHT
662
01-Aug-2023
21:03



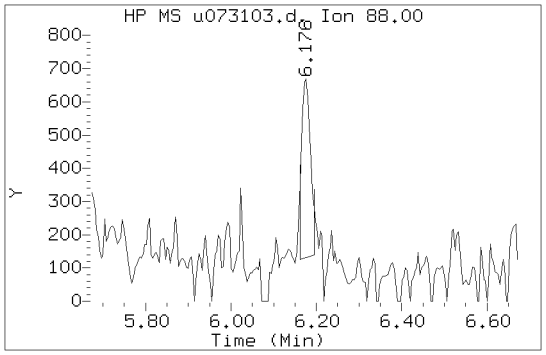
1,4-Dioxane ()

Reason Code:

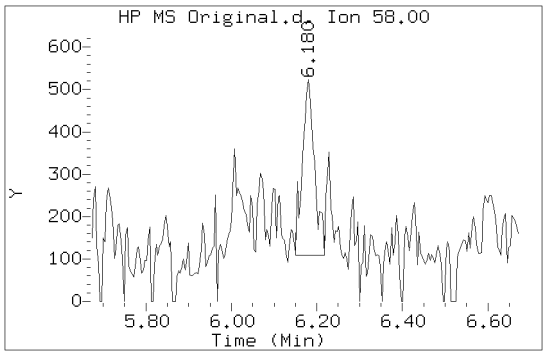
BEFORE
MASS
88
AREA
808
HEIGHT
537
01-Aug-2023
21:03



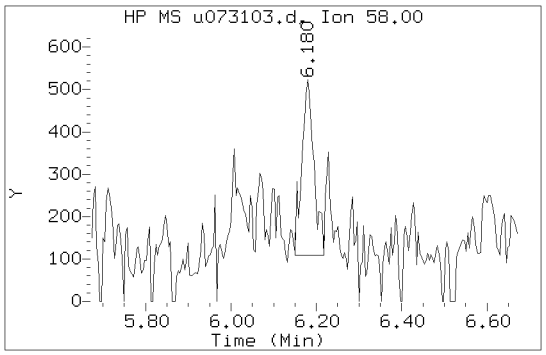
AFTER
MASS
88
AREA
808
HEIGHT
537
01-Aug-2023
21:03



BEFORE
MASS
58
AREA
823
HEIGHT
414
01-Aug-2023
21:03



AFTER
MASS
58
AREA
823
HEIGHT
414
01-Aug-2023
21:03

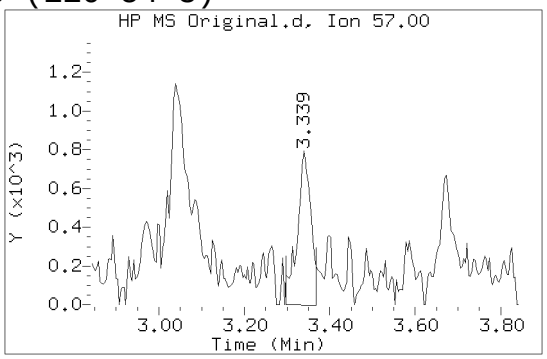


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

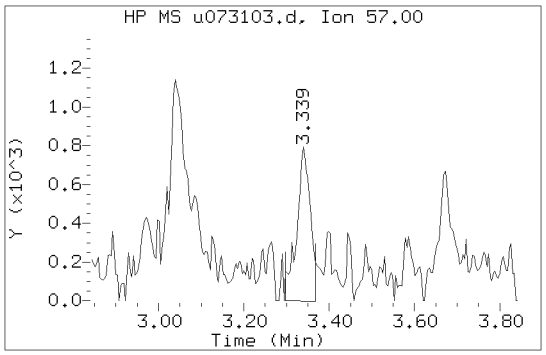
n-Hexane (110-54-3)

Reason Code:

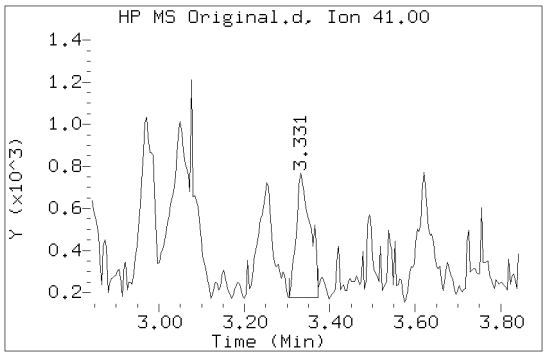
BEFORE
MASS
57
AREA
1804
HEIGHT
794
01-Aug-2023
21:03



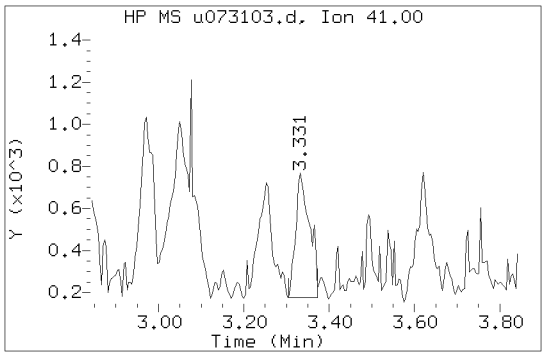
AFTER
MASS
57
AREA
1804
HEIGHT
794
01-Aug-2023
21:03



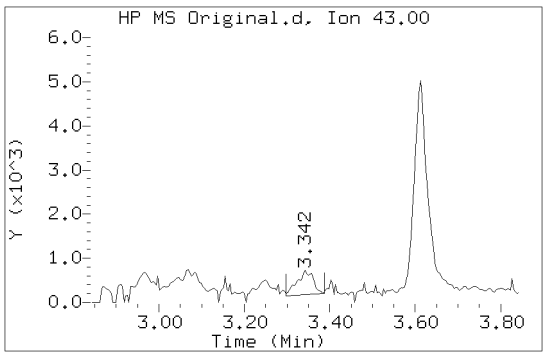
BEFORE
MASS
41
AREA
1365
HEIGHT
592
01-Aug-2023
21:03



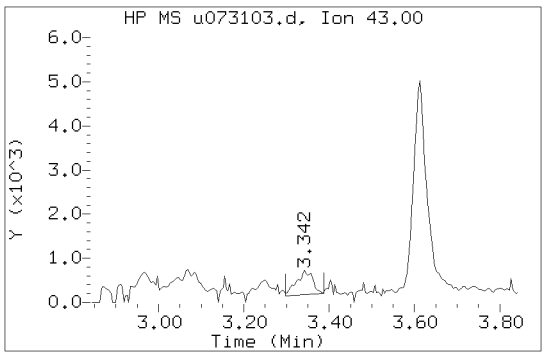
AFTER
MASS
41
AREA
1365
HEIGHT
592
01-Aug-2023
21:03



BEFORE
MASS
43
AREA
1425
HEIGHT
550
01-Aug-2023
21:03



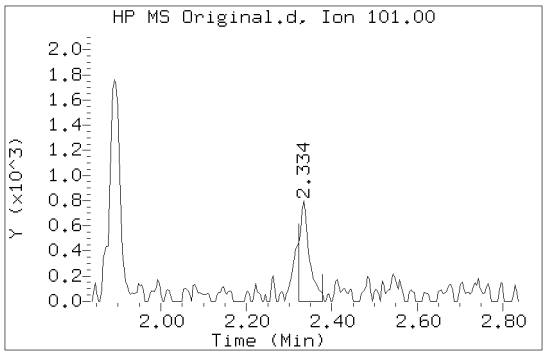
AFTER
MASS
43
AREA
1425
HEIGHT
550
01-Aug-2023
21:03



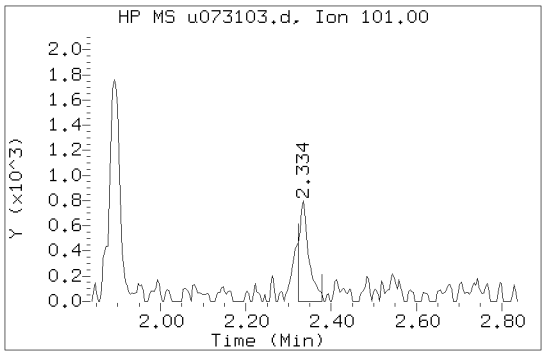
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
101
AREA
1250
HEIGHT
802
01-Aug-2023
21:03



AFTER
MASS
101
AREA
1250
HEIGHT
802
01-Aug-2023
21:03



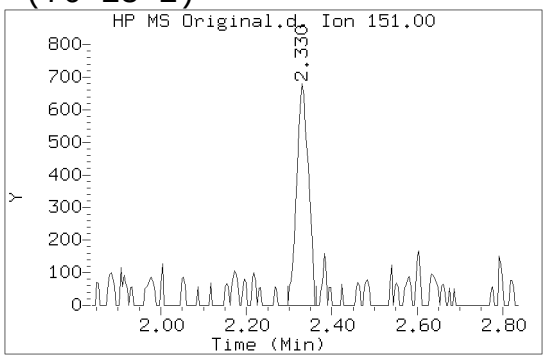
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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Freon TF (76-13-1)

Reason Code:

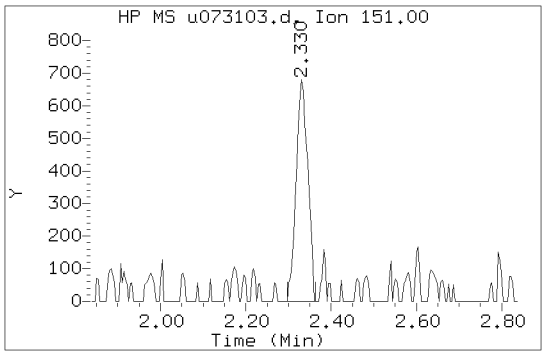
BEFORE

MASS
151
AREA
1313
HEIGHT
680
01-Aug-2023
21:03



AFTER

MASS
151
AREA
1313
HEIGHT
680
01-Aug-2023
21:03

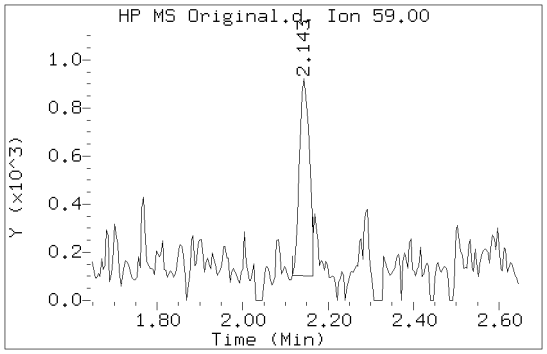


Diethyl ether (60-29-7)

Reason Code:

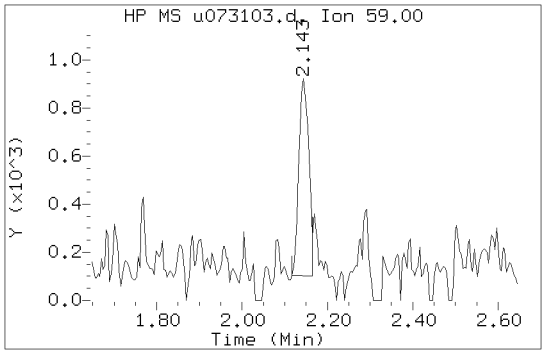
BEFORE

MASS
59
AREA
1362
HEIGHT
820
01-Aug-2023
21:03



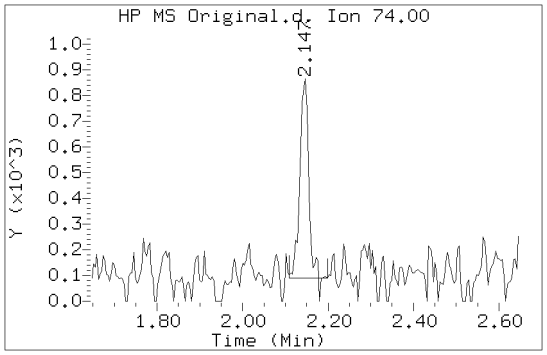
AFTER

MASS
59
AREA
1362
HEIGHT
820
01-Aug-2023
21:03



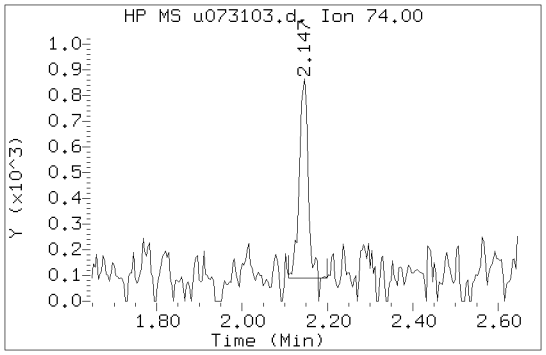
BEFORE

MASS
74
AREA
1129
HEIGHT
775
01-Aug-2023
21:03



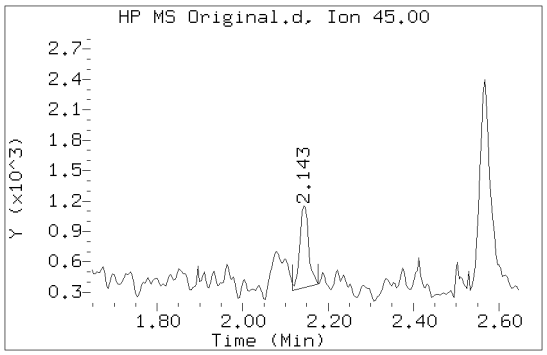
AFTER

MASS
74
AREA
1129
HEIGHT
775
01-Aug-2023
21:03



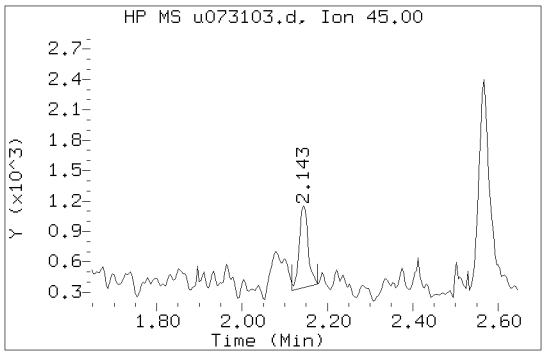
BEFORE

MASS
45
AREA
1192
HEIGHT
809
01-Aug-2023
21:03



AFTER

MASS
45
AREA
1192
HEIGHT
809
01-Aug-2023
21:03

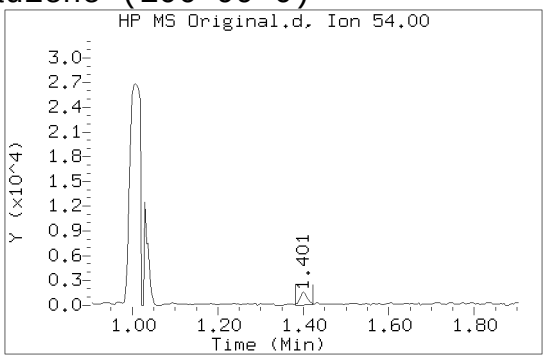


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

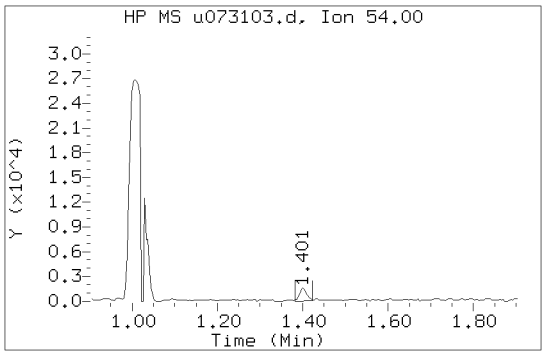
1,3-Butadiene (106-99-0)

Reason Code:

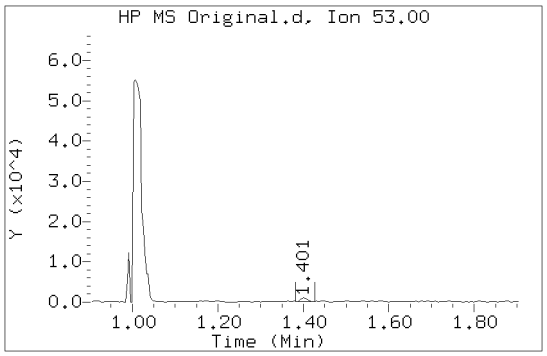
BEFORE
MASS
54
AREA
1979
HEIGHT
1609
01-Aug-2023
21:03



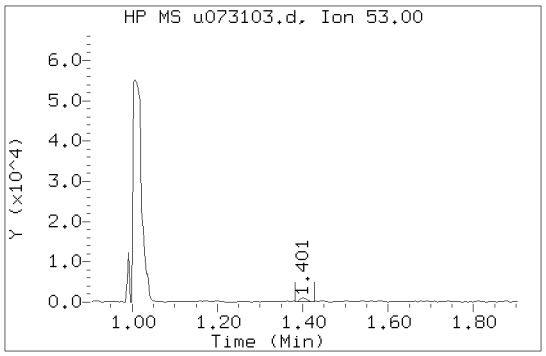
AFTER
MASS
54
AREA
1979
HEIGHT
1609
01-Aug-2023
21:03



BEFORE
MASS
53
AREA
1102
HEIGHT
938
01-Aug-2023
21:03



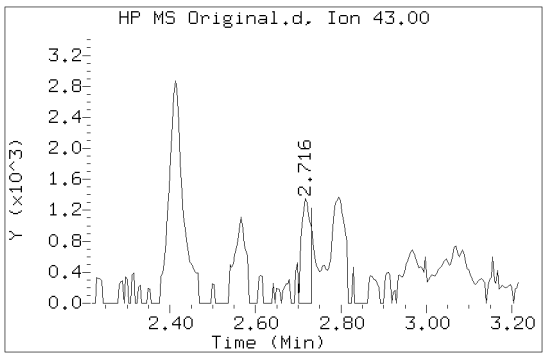
AFTER
MASS
53
AREA
1102
HEIGHT
938
01-Aug-2023
21:03



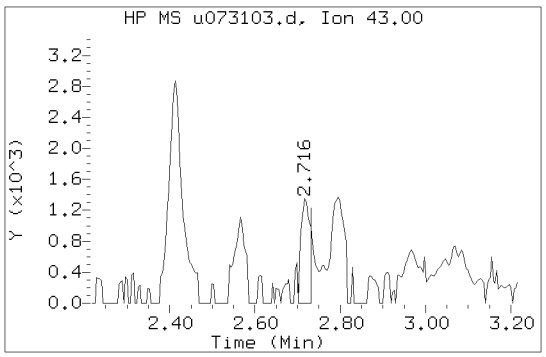
Methyl acetate (79-20-9)

Reason Code:

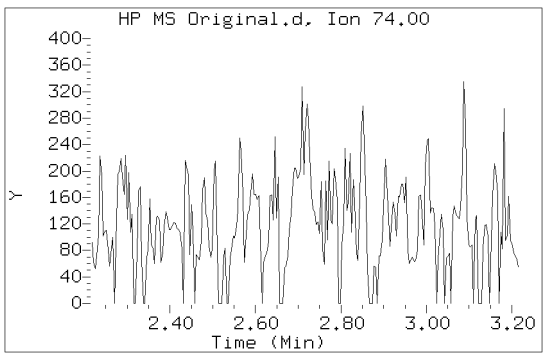
BEFORE
MASS
43
AREA
1992
HEIGHT
1351
01-Aug-2023
21:03



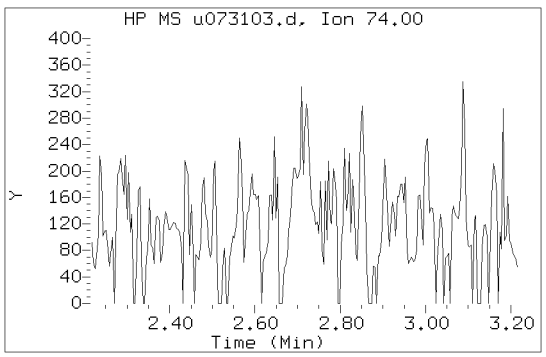
AFTER
MASS
43
AREA
1992
HEIGHT
1351
01-Aug-2023
21:03



BEFORE
MASS
74
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
74
AREA
0
HEIGHT
0
01-Aug-2023
21:03

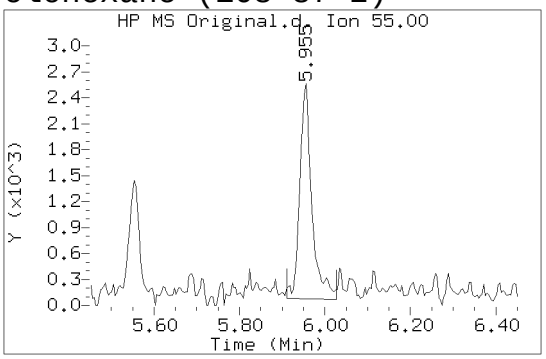


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

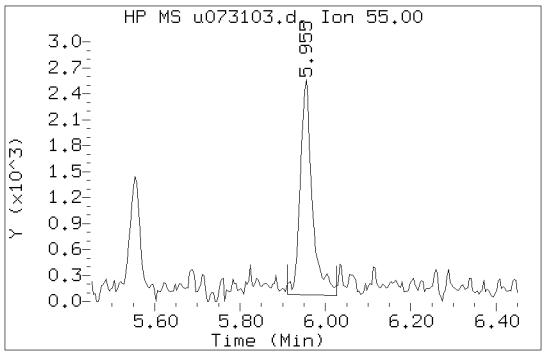
Methylcyclohexane (108-87-2)

Reason Code:

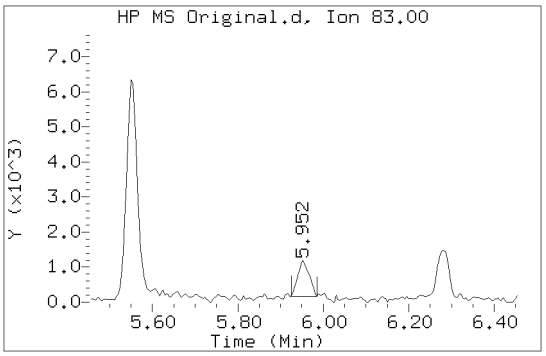
BEFORE
MASS
55
AREA
4995
HEIGHT
2486
01-Aug-2023
21:03



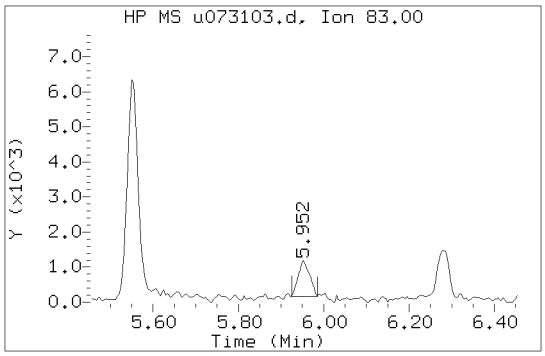
AFTER
MASS
55
AREA
4995
HEIGHT
2486
01-Aug-2023
21:03



BEFORE
MASS
83
AREA
1938
HEIGHT
1034
01-Aug-2023
21:03



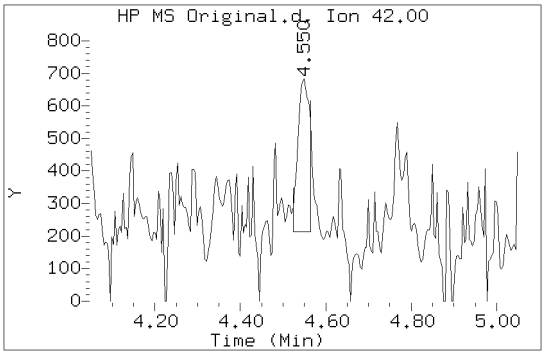
AFTER
MASS
83
AREA
1938
HEIGHT
1034
01-Aug-2023
21:03



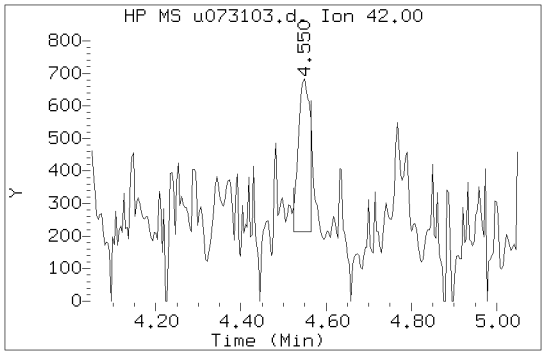
Tetrahydrofuran (109-99-9)

Reason Code:

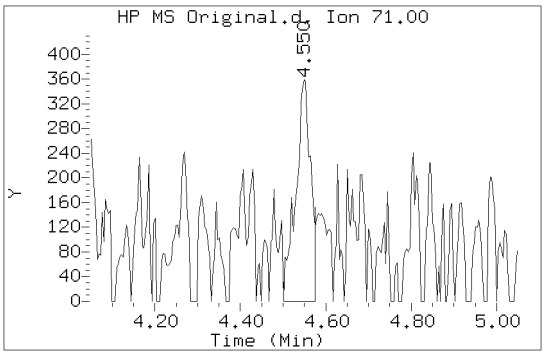
BEFORE
MASS
42
AREA
900
HEIGHT
469
01-Aug-2023
21:03



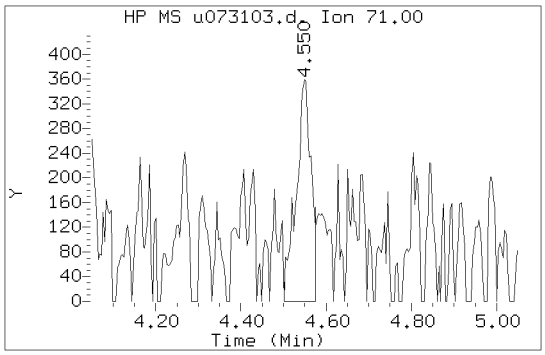
AFTER
MASS
42
AREA
900
HEIGHT
469
01-Aug-2023
21:03



BEFORE
MASS
71
AREA
884
HEIGHT
359
01-Aug-2023
21:03



AFTER
MASS
71
AREA
884
HEIGHT
359
01-Aug-2023
21:03

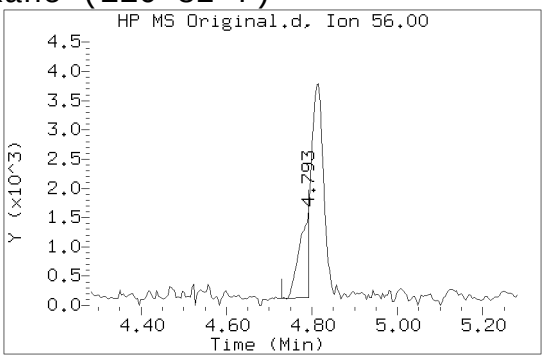


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InstruID : VOA9.i
LabSampID : VSTD000.5

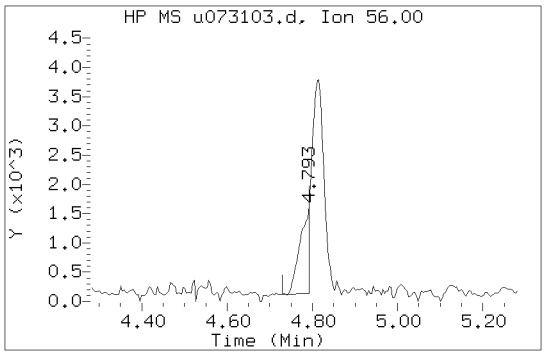
Cyclohexane (110-82-7)

Reason Code:

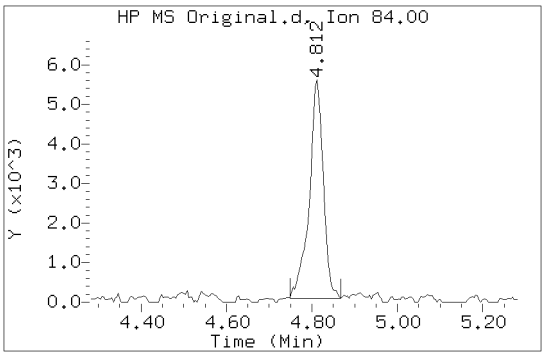
BEFORE
MASS
56
AREA
2383
HEIGHT
1517
01-Aug-2023
21:03



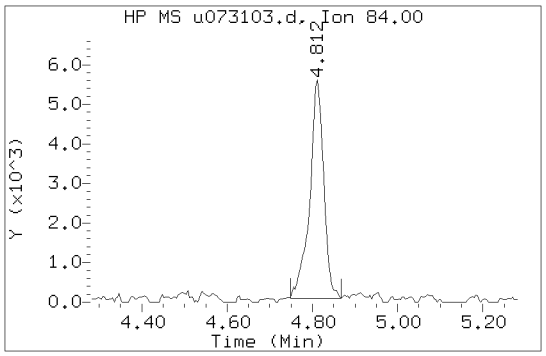
AFTER
MASS
56
AREA
2383
HEIGHT
1517
01-Aug-2023
21:03



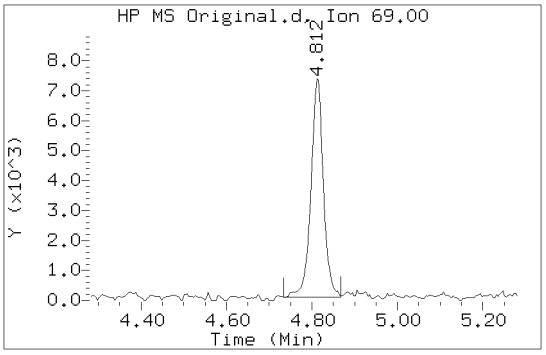
BEFORE
MASS
84
AREA
12651
HEIGHT
5518
01-Aug-2023
21:03



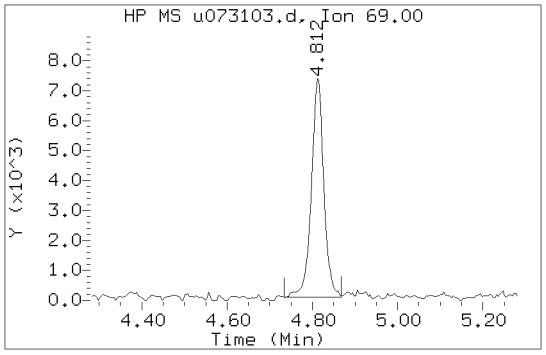
AFTER
MASS
84
AREA
12651
HEIGHT
5518
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
14776
HEIGHT
7294
01-Aug-2023
21:03



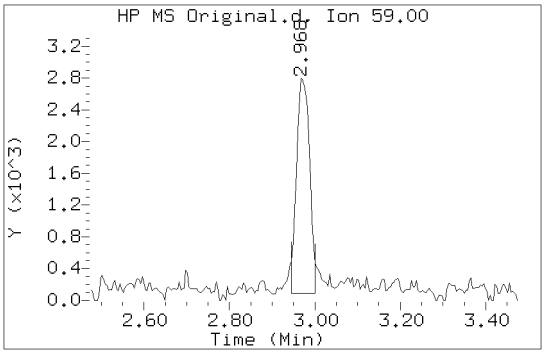
AFTER
MASS
69
AREA
14776
HEIGHT
7294
01-Aug-2023
21:03



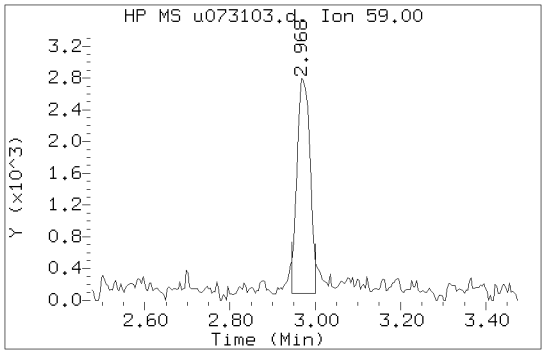
Tert-butyl alcohol (75-65-0)

Reason Code:

BEFORE
MASS
59
AREA
5912
HEIGHT
2703
01-Aug-2023
21:03



AFTER
MASS
59
AREA
5912
HEIGHT
2703
01-Aug-2023
21:03



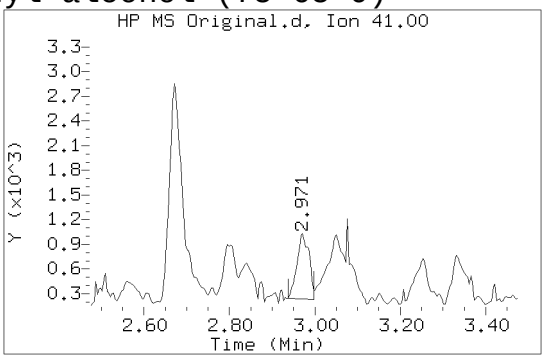
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

Tert-butyl alcohol (75-65-0)

Reason Code:

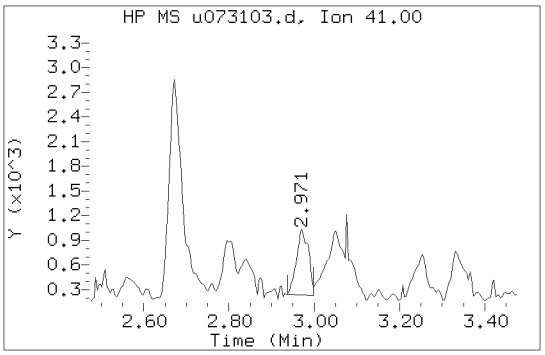
BEFORE

MASS
41
AREA
1590
HEIGHT
798
01-Aug-2023
21:03



AFTER

MASS
41
AREA
1590
HEIGHT
798
01-Aug-2023
21:03

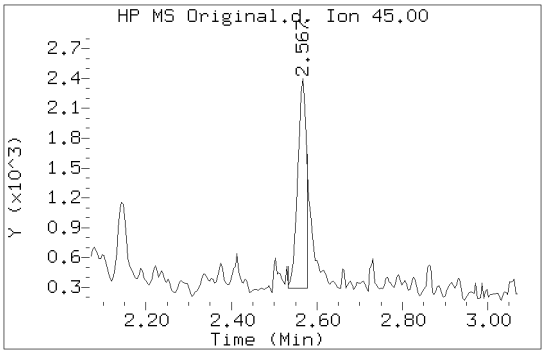


Isopropyl alcohol (67-63-0)

Reason Code:

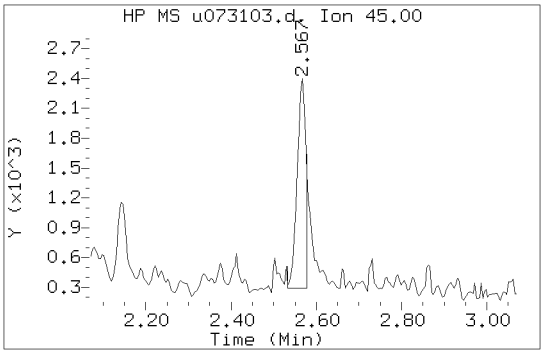
BEFORE

MASS
45
AREA
2977
HEIGHT
2103
01-Aug-2023
21:03



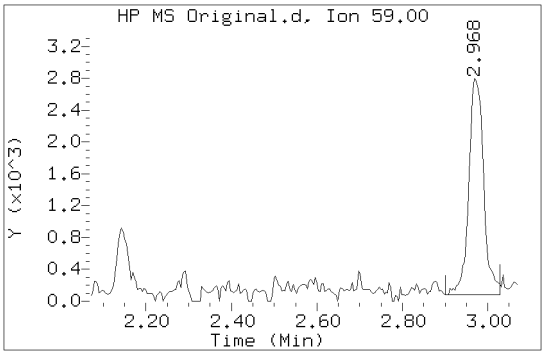
AFTER

MASS
45
AREA
2977
HEIGHT
2103
01-Aug-2023
21:03



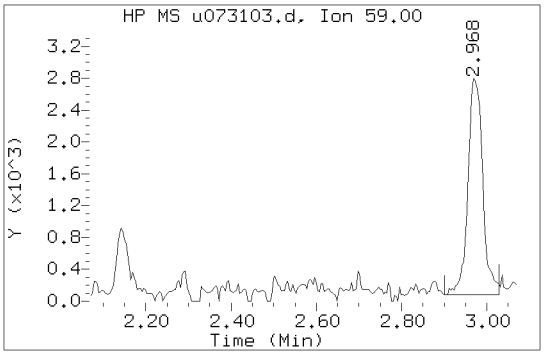
BEFORE

MASS
59
AREA
6564
HEIGHT
2710
01-Aug-2023
21:03



AFTER

MASS
59
AREA
6564
HEIGHT
2710
01-Aug-2023
21:03

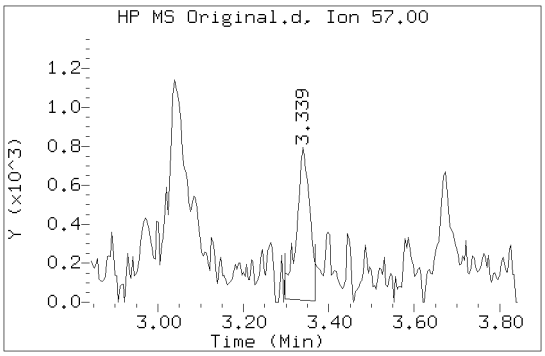


Allyl alcohol (107-18-6)

Reason Code:

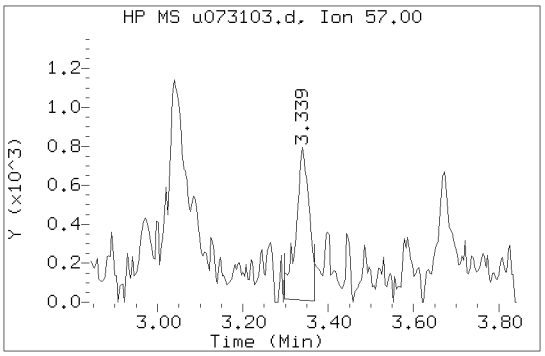
BEFORE

MASS
57
AREA
1755
HEIGHT
784
01-Aug-2023
21:03



AFTER

MASS
57
AREA
1755
HEIGHT
784
01-Aug-2023
21:03

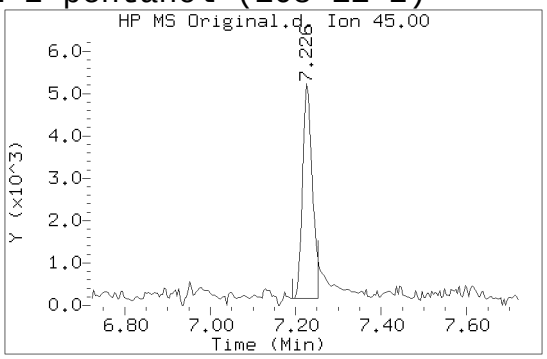


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InstruID : VOA9.i
LabSampID : VSTD000.5

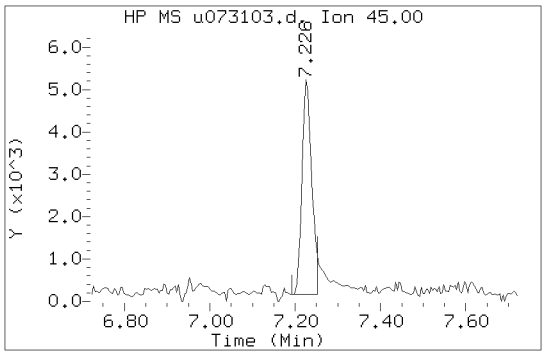
4-Methyl-2-pentanol (108-11-2)

Reason Code:

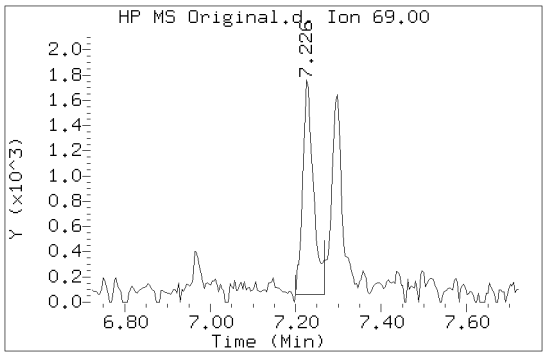
BEFORE
MASS
45
AREA
8154
HEIGHT
5075
01-Aug-2023
21:03



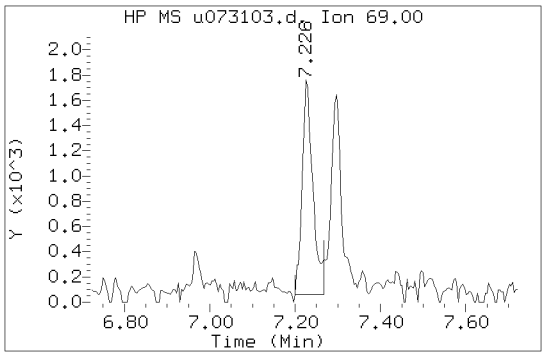
AFTER
MASS
45
AREA
8154
HEIGHT
5075
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
3007
HEIGHT
1702
01-Aug-2023
21:03



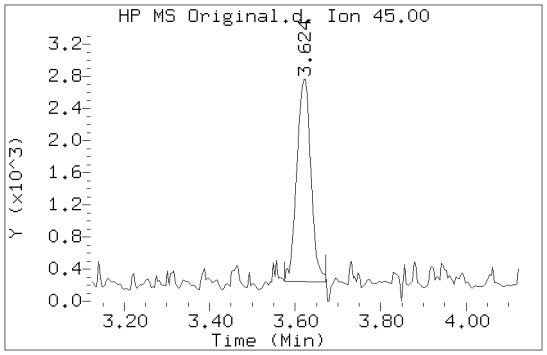
AFTER
MASS
69
AREA
3007
HEIGHT
1702
01-Aug-2023
21:03



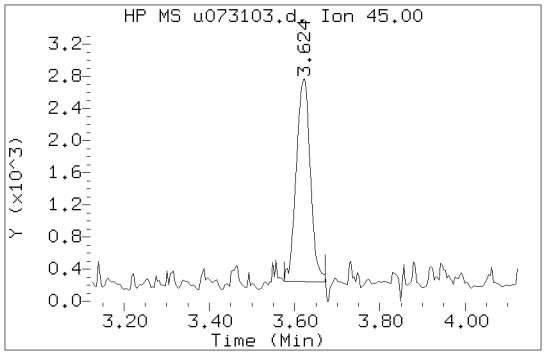
Diisopropyl ether (108-20-3)

Reason Code:

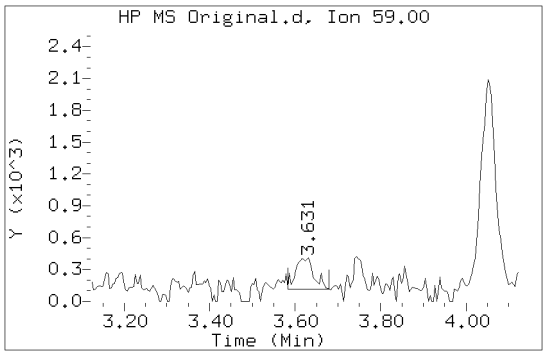
BEFORE
MASS
45
AREA
5880
HEIGHT
2523
01-Aug-2023
21:03



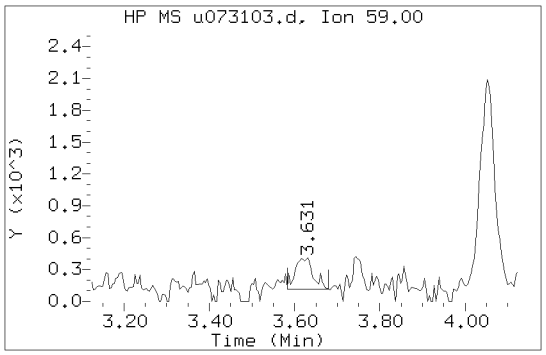
AFTER
MASS
45
AREA
5880
HEIGHT
2523
01-Aug-2023
21:03



BEFORE
MASS
59
AREA
862
HEIGHT
292
01-Aug-2023
21:03



AFTER
MASS
59
AREA
862
HEIGHT
292
01-Aug-2023
21:03

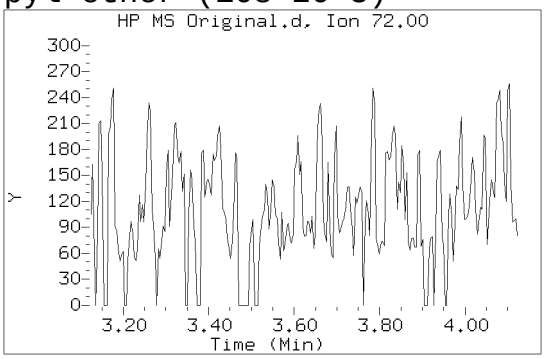


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

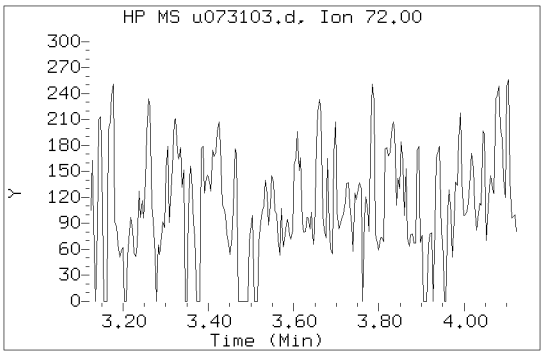
Diisopropyl ether (108-20-3)

Reason Code:

BEFORE
MASS
72
AREA
0
HEIGHT
0
01-Aug-2023
21:03



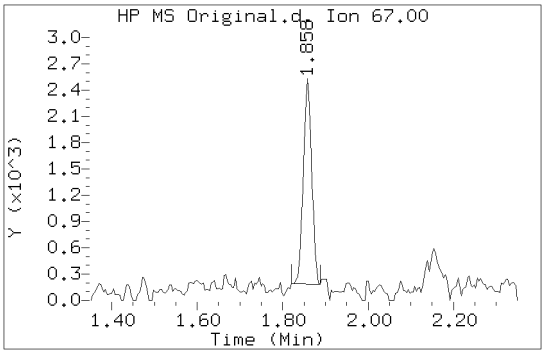
AFTER
MASS
72
AREA
0
HEIGHT
0
01-Aug-2023
21:03



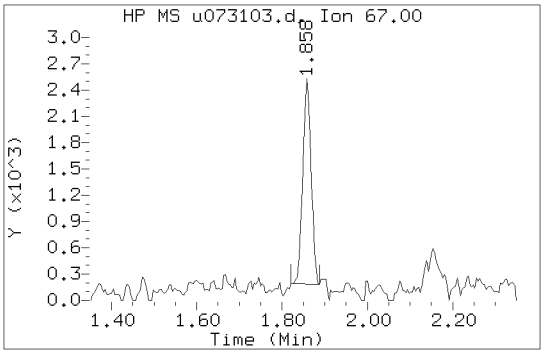
Dichlorofluoromethane (75-43-4)

Reason Code:

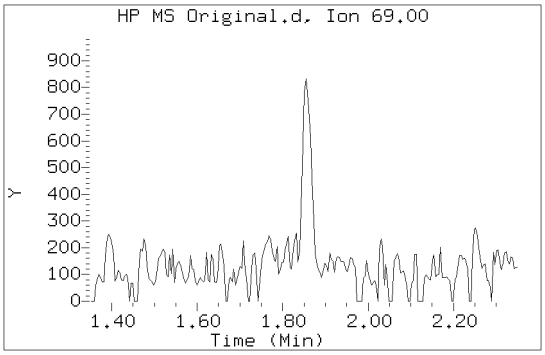
BEFORE
MASS
67
AREA
3290
HEIGHT
2346
01-Aug-2023
21:03



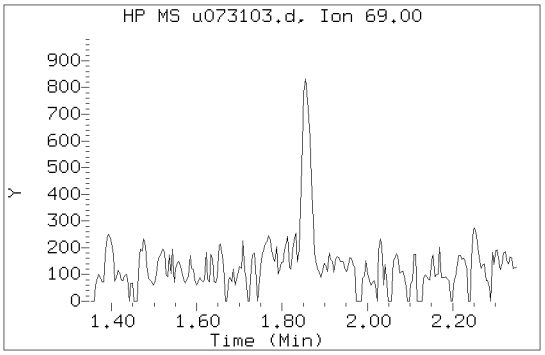
AFTER
MASS
67
AREA
3290
HEIGHT
2346
01-Aug-2023
21:03



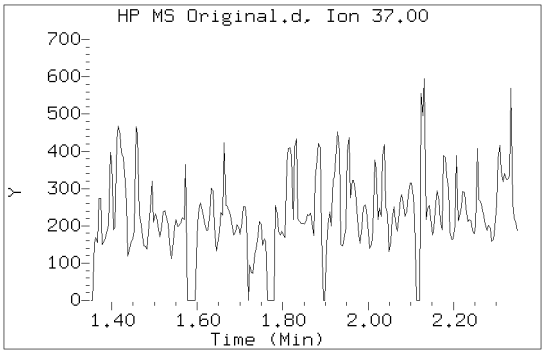
BEFORE
MASS
69
AREA
0
HEIGHT
0
01-Aug-2023
21:03



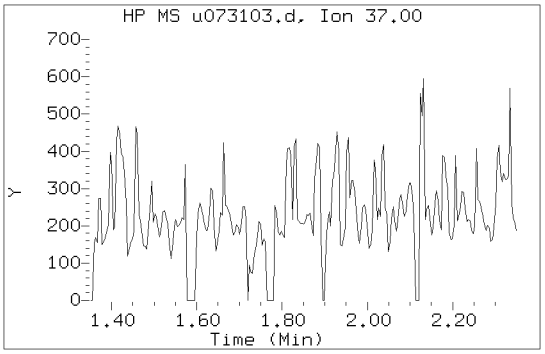
AFTER
MASS
69
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
37
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
37
AREA
0
HEIGHT
0
01-Aug-2023
21:03

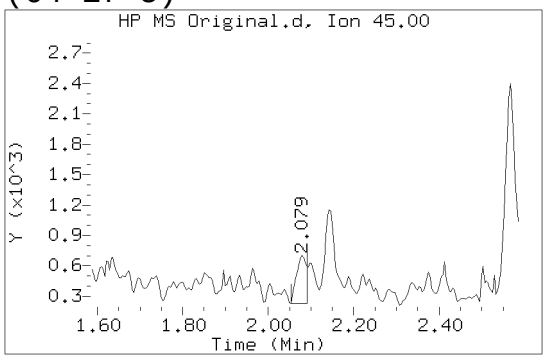


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
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InstruID : VOA9.i
LabSampID : VSTD000.5

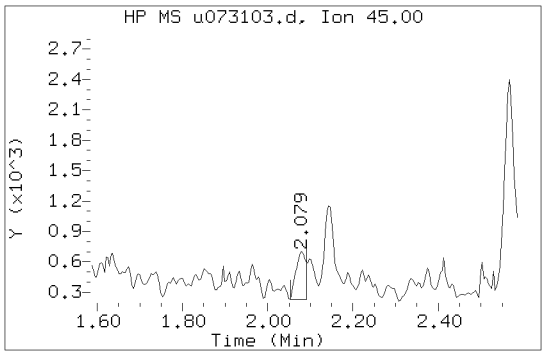
Ethanol (64-17-5)

Reason Code:

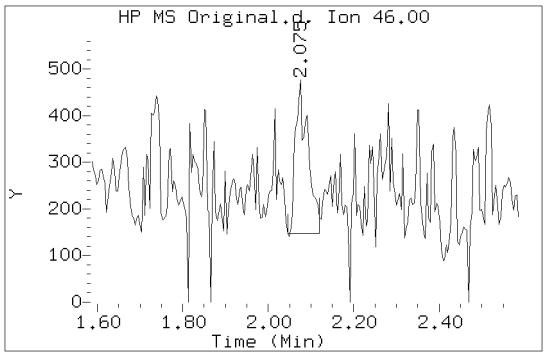
BEFORE
MASS
45
AREA
749
HEIGHT
471
01-Aug-2023
21:03



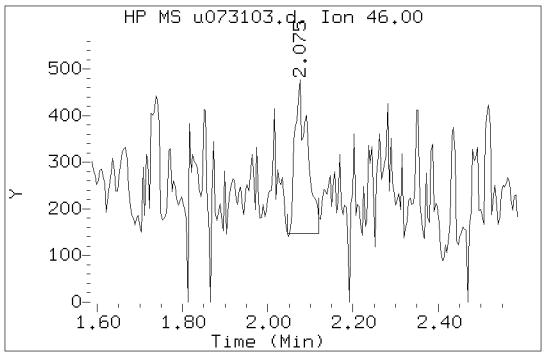
AFTER
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45
AREA
749
HEIGHT
471
01-Aug-2023
21:03



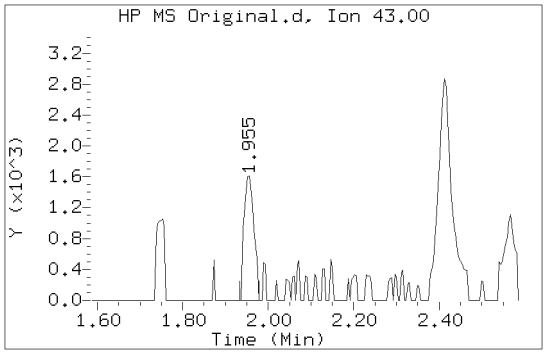
BEFORE
MASS
46
AREA
678
HEIGHT
330
01-Aug-2023
21:03



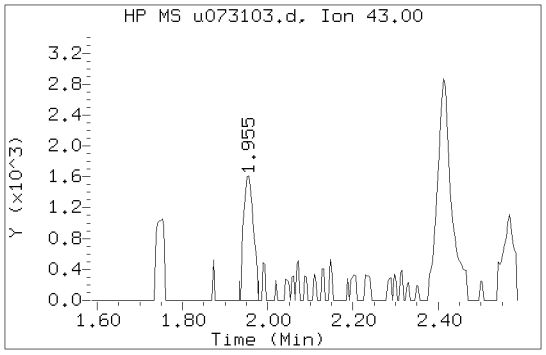
AFTER
MASS
46
AREA
678
HEIGHT
330
01-Aug-2023
21:03



BEFORE
MASS
43
AREA
2584
HEIGHT
1611
01-Aug-2023
21:03



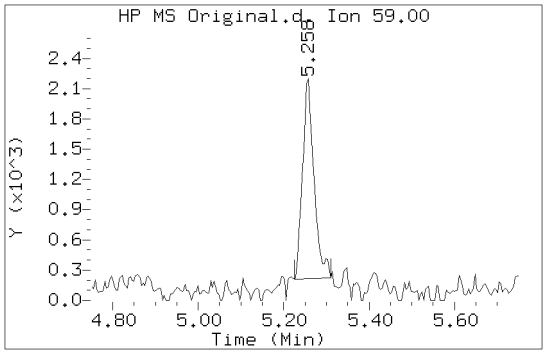
AFTER
MASS
43
AREA
2584
HEIGHT
1611
01-Aug-2023
21:03



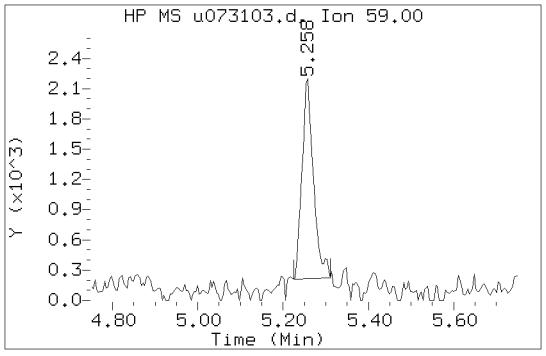
tert-Butyl formate (762-75-4)

Reason Code:

BEFORE
MASS
59
AREA
3754
HEIGHT
1982
01-Aug-2023
21:03



AFTER
MASS
59
AREA
3754
HEIGHT
1982
01-Aug-2023
21:03

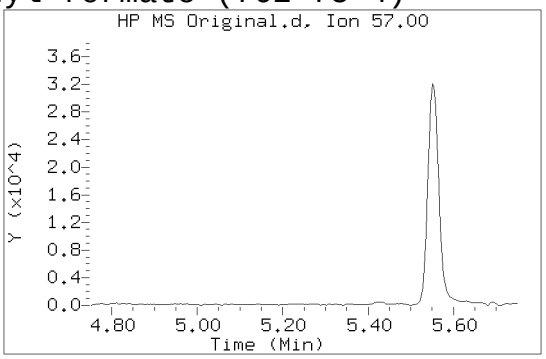


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

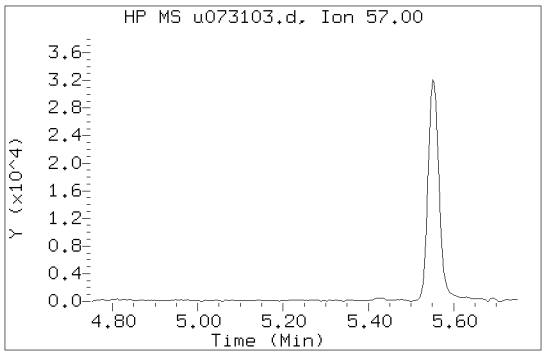
tert-Butyl formate (762-75-4)

Reason Code:

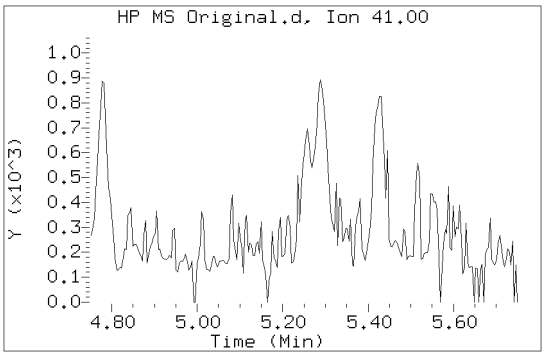
BEFORE
MASS
57
AREA
0
HEIGHT
0
01-Aug-2023
21:03



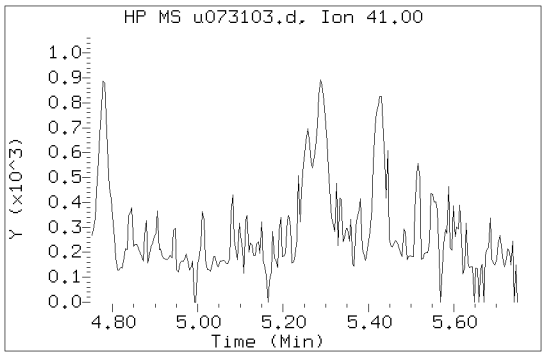
AFTER
MASS
57
AREA
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HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
41
AREA
0
HEIGHT
0
01-Aug-2023
21:03



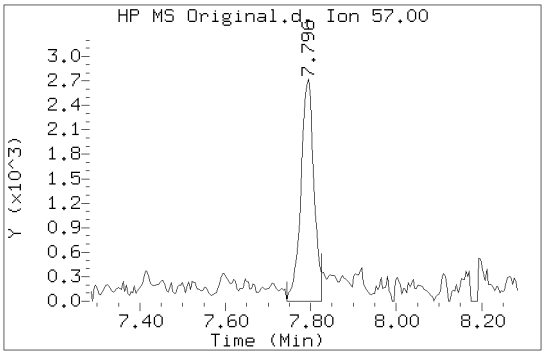
AFTER
MASS
41
AREA
0
HEIGHT
0
01-Aug-2023
21:03



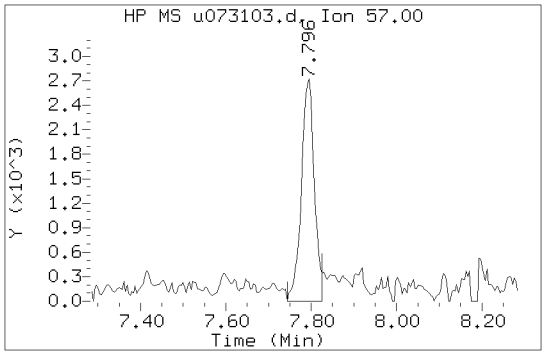
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

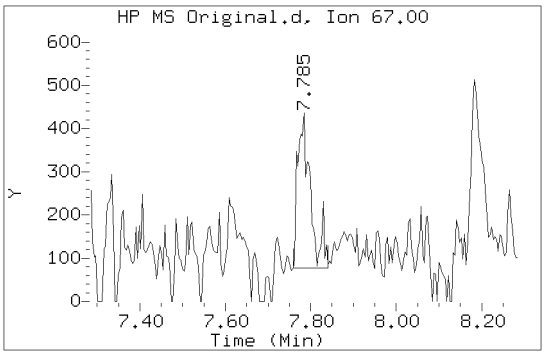
BEFORE
MASS
57
AREA
5813
HEIGHT
2724
01-Aug-2023
21:03



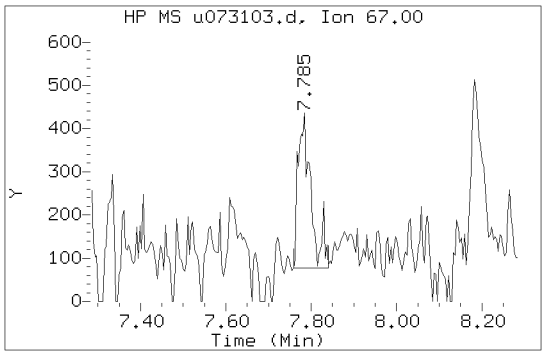
AFTER
MASS
57
AREA
5813
HEIGHT
2724
01-Aug-2023
21:03



BEFORE
MASS
67
AREA
752
HEIGHT
359
01-Aug-2023
21:03



AFTER
MASS
67
AREA
752
HEIGHT
359
01-Aug-2023
21:03



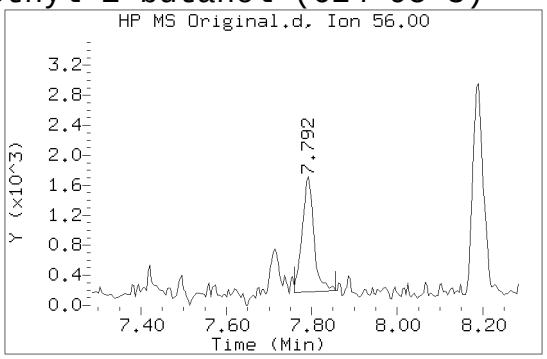
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

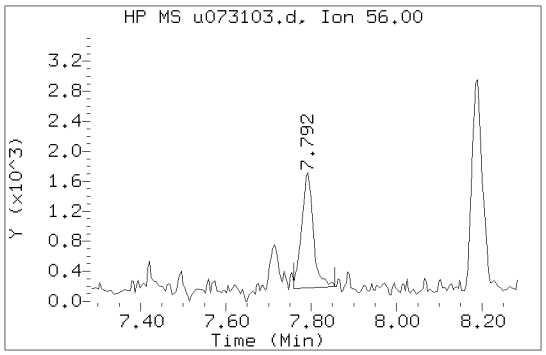
BEFORE

MASS
56
AREA
2954
HEIGHT
1533
01-Aug-2023
21:03



AFTER

MASS
56
AREA
2954
HEIGHT
1533
01-Aug-2023
21:03

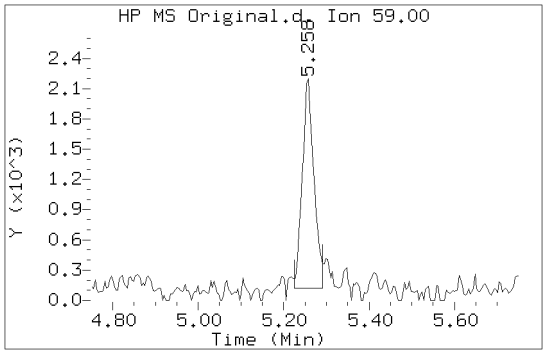


tert-Amyl alcohol (75-85-4)

Reason Code:

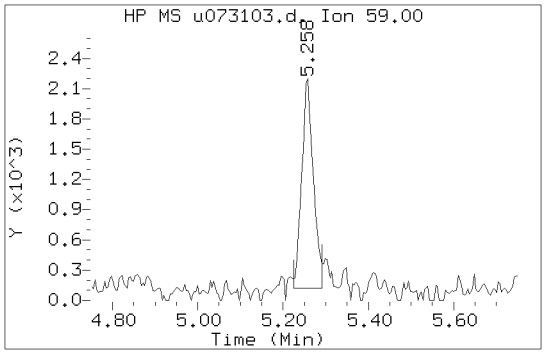
BEFORE

MASS
59
AREA
4014
HEIGHT
2076
01-Aug-2023
21:03



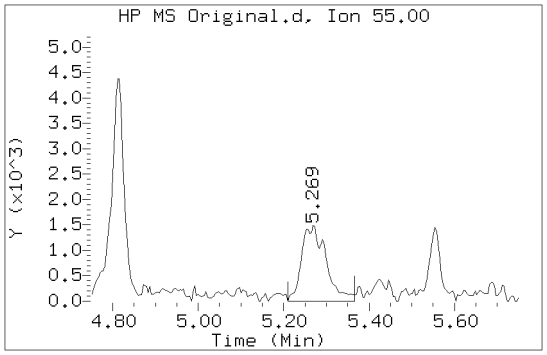
AFTER

MASS
59
AREA
4014
HEIGHT
2076
01-Aug-2023
21:03



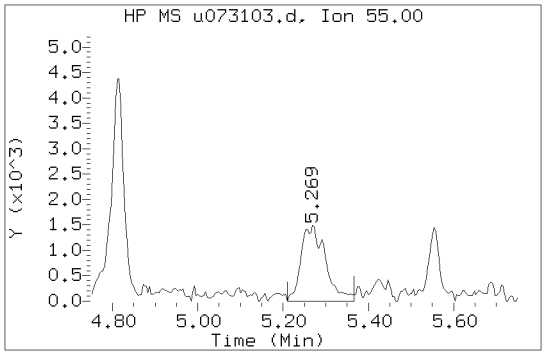
BEFORE

MASS
55
AREA
5997
HEIGHT
1494
01-Aug-2023
21:03



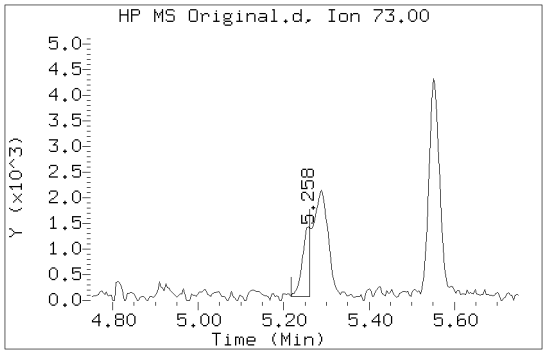
AFTER

MASS
55
AREA
5997
HEIGHT
1494
01-Aug-2023
21:03



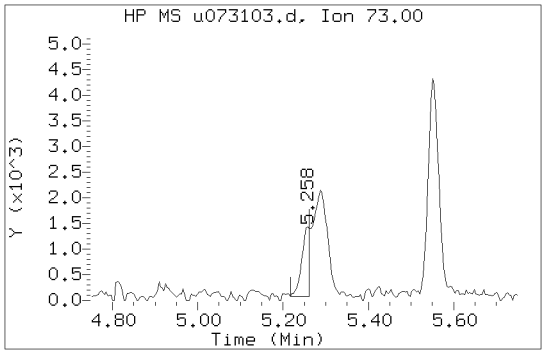
BEFORE

MASS
73
AREA
1798
HEIGHT
1371
01-Aug-2023
21:03



AFTER

MASS
73
AREA
1798
HEIGHT
1371
01-Aug-2023
21:03

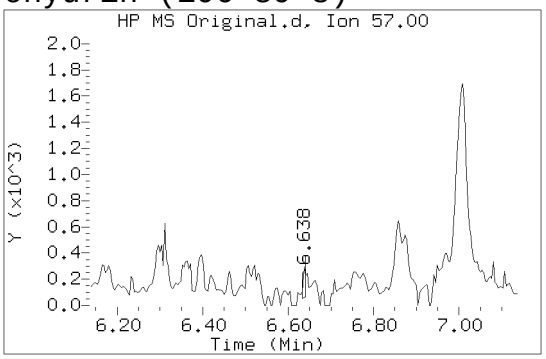


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

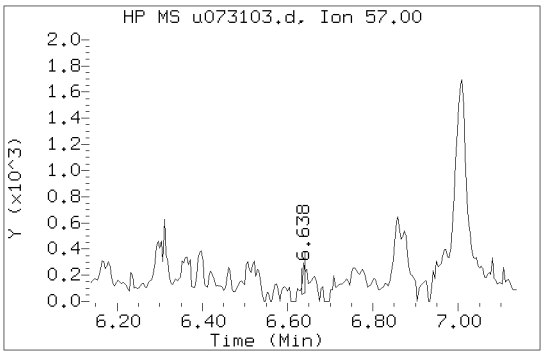
Epichlorohydrin (106-89-8)

Reason Code:

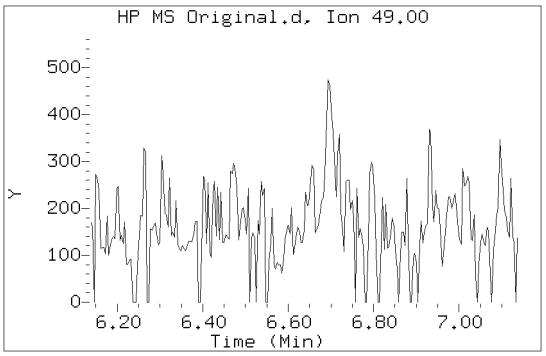
BEFORE
MASS
57
AREA
99
HEIGHT
233
01-Aug-2023
21:03



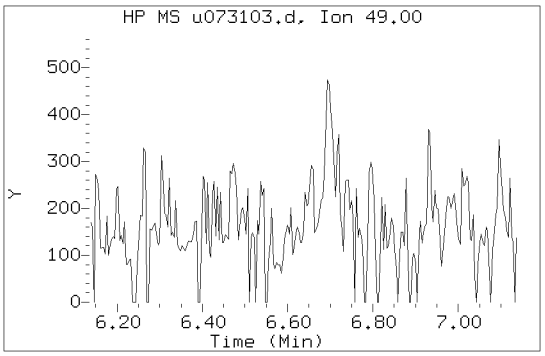
AFTER
MASS
57
AREA
99
HEIGHT
233
01-Aug-2023
21:03



BEFORE
MASS
49
AREA
0
HEIGHT
0
01-Aug-2023
21:03



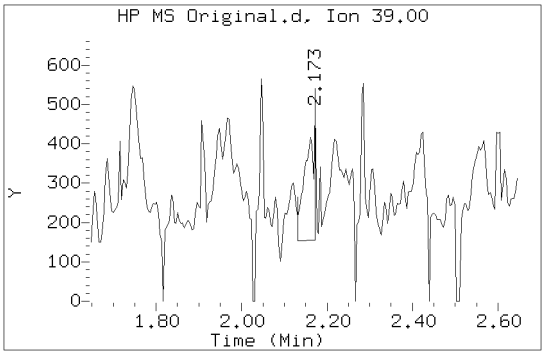
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MASS
49
AREA
0
HEIGHT
0
01-Aug-2023
21:03



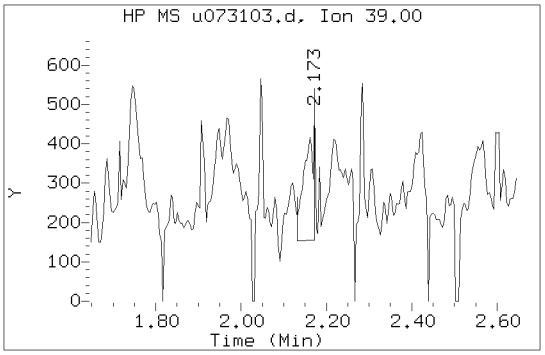
Isoprene (78-79-5)

Reason Code:

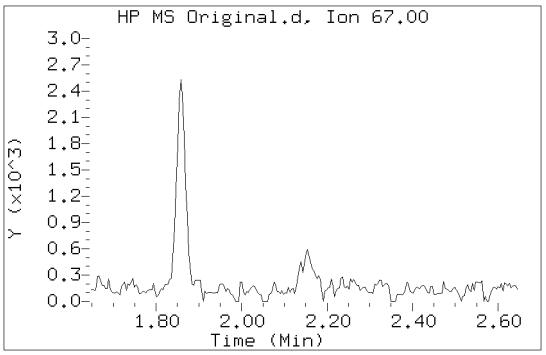
BEFORE
MASS
39
AREA
491
HEIGHT
336
01-Aug-2023
21:03



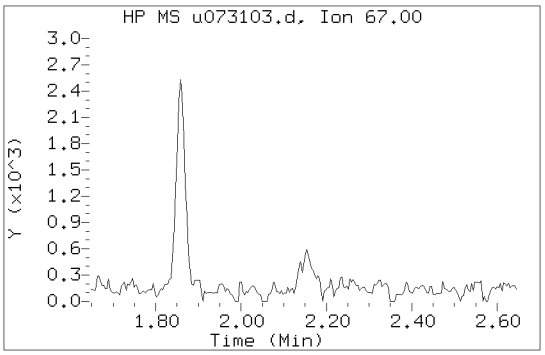
AFTER
MASS
39
AREA
491
HEIGHT
336
01-Aug-2023
21:03



BEFORE
MASS
67
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
67
AREA
0
HEIGHT
0
01-Aug-2023
21:03

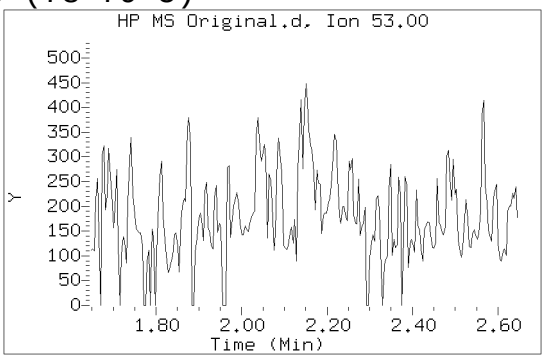


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

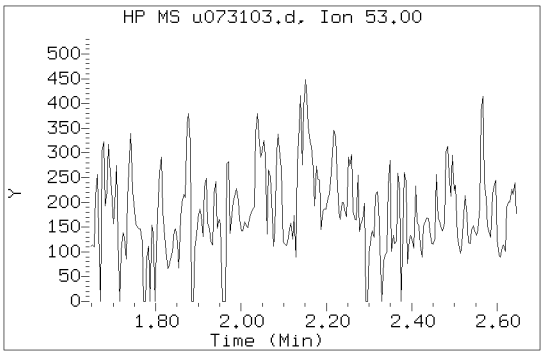
Isoprene (78-79-5)

Reason Code:

BEFORE
MASS
53
AREA
0
HEIGHT
0
01-Aug-2023
21:03



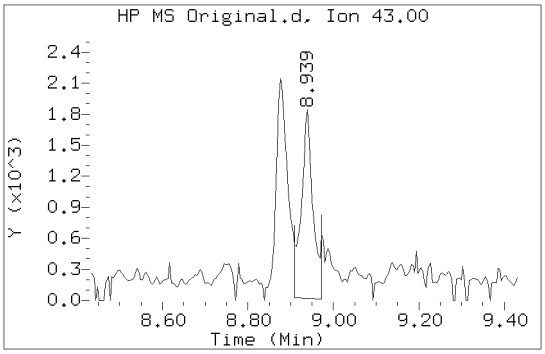
AFTER
MASS
53
AREA
0
HEIGHT
0
01-Aug-2023
21:03



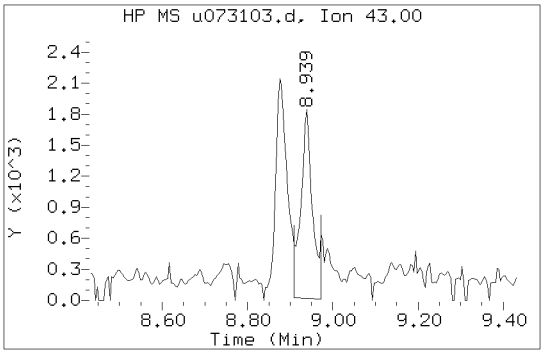
n-Amyl acetate (628-63-7)

Reason Code:

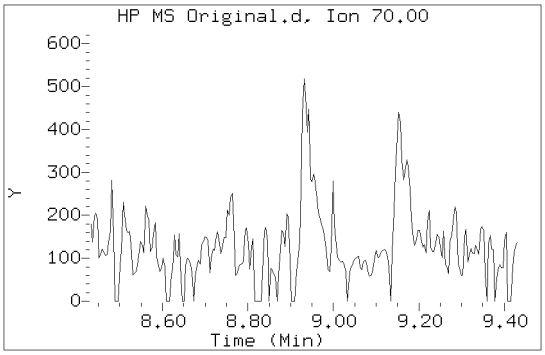
BEFORE
MASS
43
AREA
3597
HEIGHT
1824
01-Aug-2023
21:03



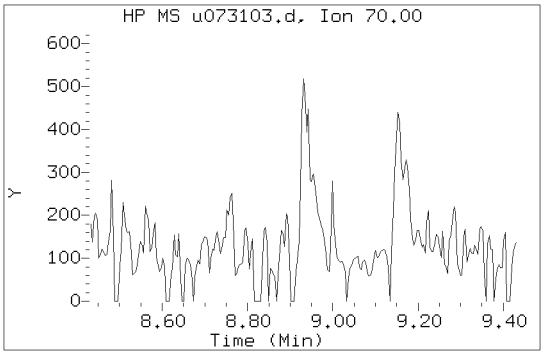
AFTER
MASS
43
AREA
3597
HEIGHT
1824
01-Aug-2023
21:03



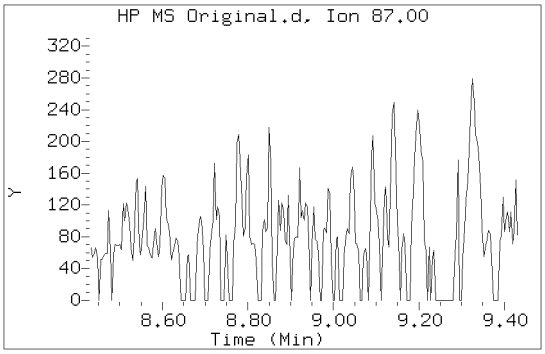
BEFORE
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



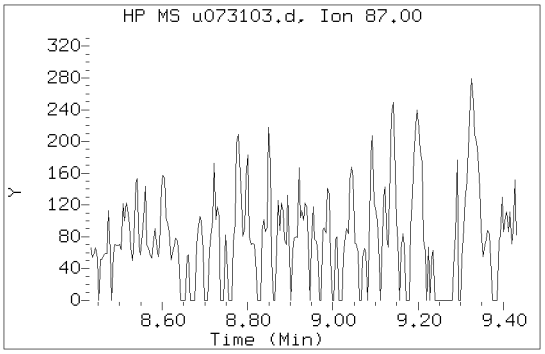
AFTER
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
87
AREA
0
HEIGHT
0
01-Aug-2023
21:03

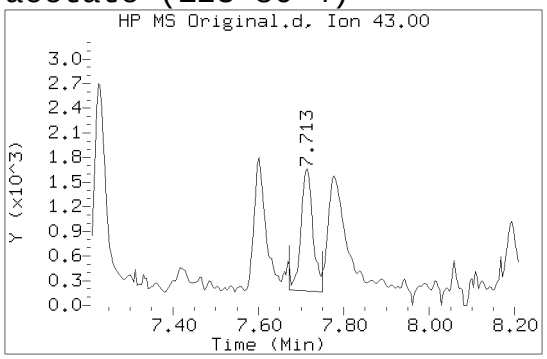


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

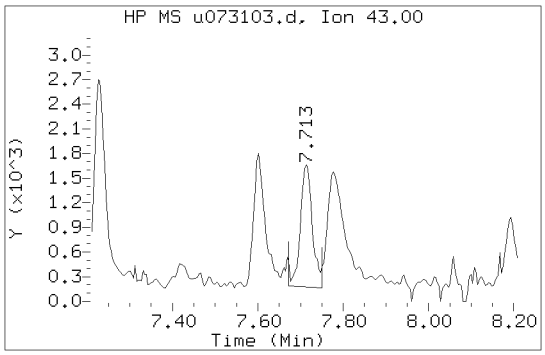
n-Butyl acetate (123-86-4)

Reason Code:

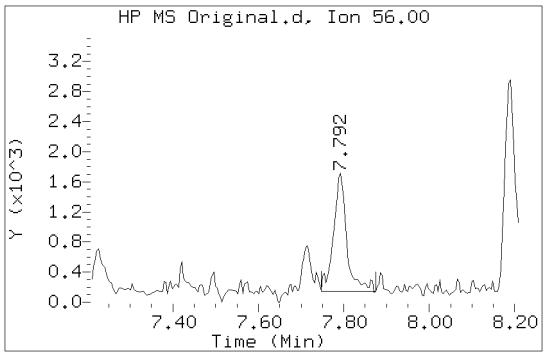
BEFORE
MASS
43
AREA
3058
HEIGHT
1489
01-Aug-2023
21:03



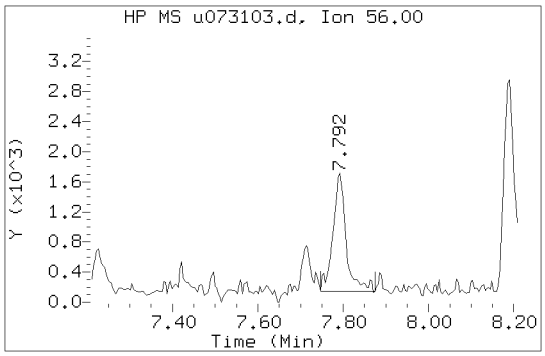
AFTER
MASS
43
AREA
3058
HEIGHT
1489
01-Aug-2023
21:03



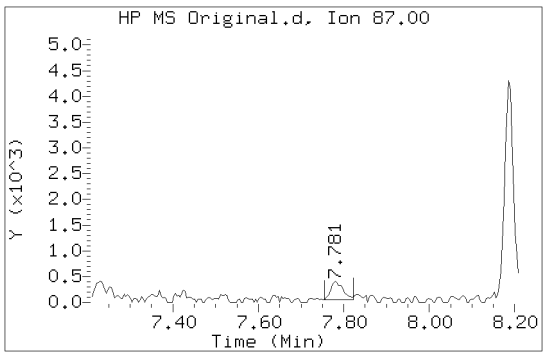
BEFORE
MASS
56
AREA
3400
HEIGHT
1573
01-Aug-2023
21:03



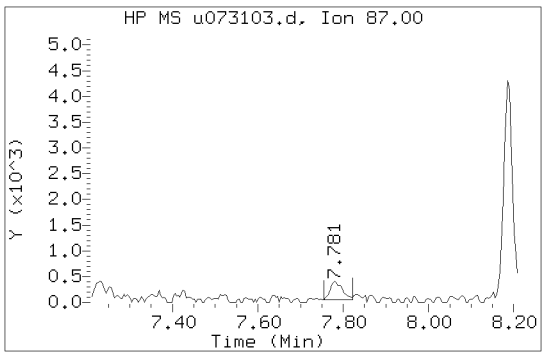
AFTER
MASS
56
AREA
3400
HEIGHT
1573
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
687
HEIGHT
357
01-Aug-2023
21:03



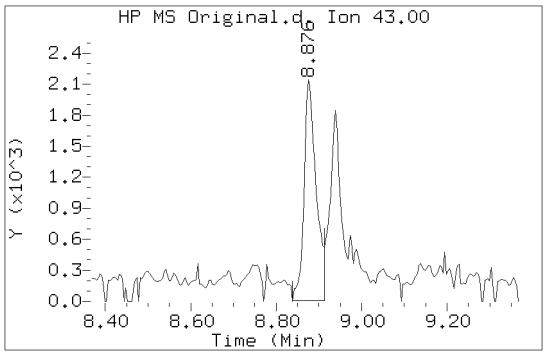
AFTER
MASS
87
AREA
687
HEIGHT
357
01-Aug-2023
21:03



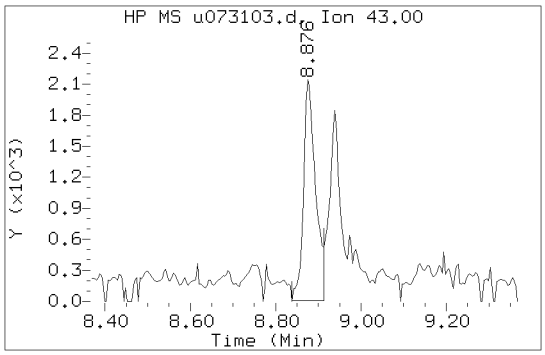
Methyl Amyl Ketone (110-43-0)

Reason Code:

BEFORE
MASS
43
AREA
4281
HEIGHT
2137
01-Aug-2023
21:03



AFTER
MASS
43
AREA
4281
HEIGHT
2137
01-Aug-2023
21:03

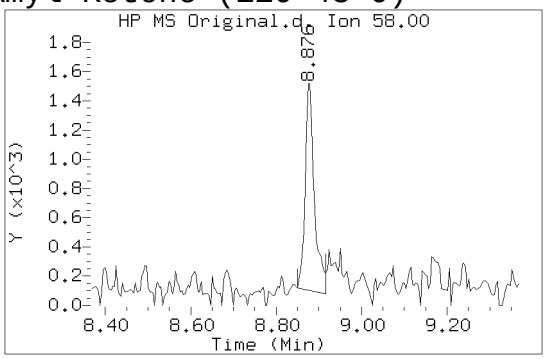


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

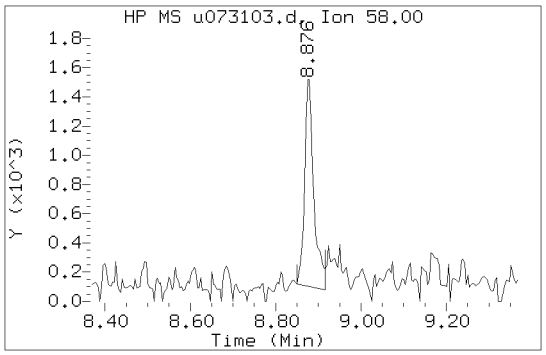
Methyl Amyl Ketone (110-43-0)

Reason Code:

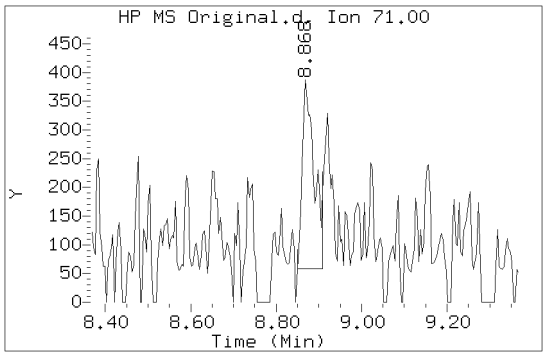
BEFORE
MASS
58
AREA
2159
HEIGHT
1413
01-Aug-2023
21:03



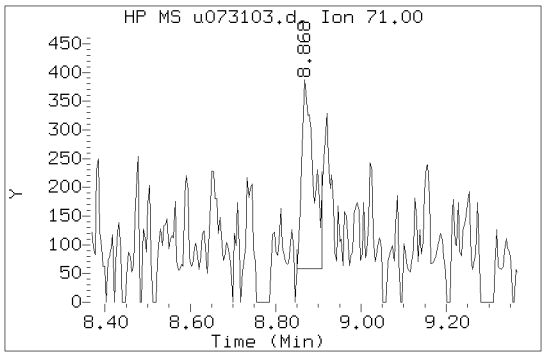
AFTER
MASS
58
AREA
2159
HEIGHT
1413
01-Aug-2023
21:03



BEFORE
MASS
71
AREA
660
HEIGHT
329
01-Aug-2023
21:03



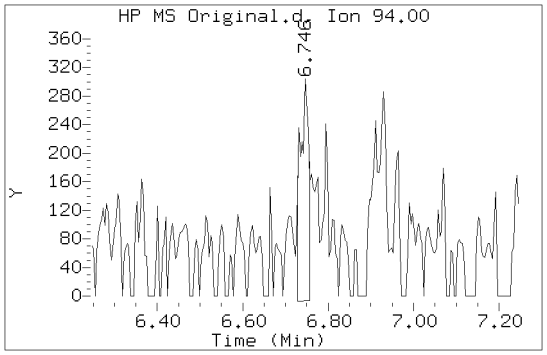
AFTER
MASS
71
AREA
660
HEIGHT
329
01-Aug-2023
21:03



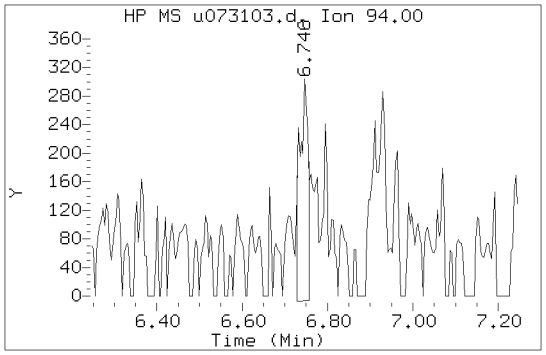
Dimethyl Disulfide (624-92-0)

Reason Code:

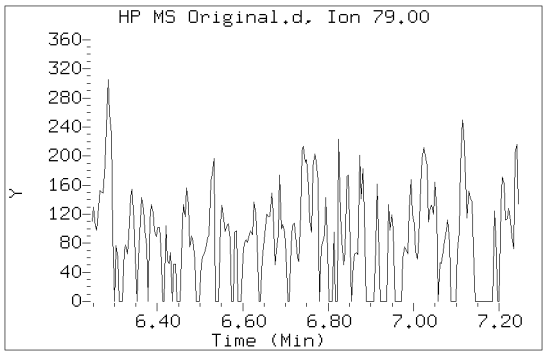
BEFORE
MASS
94
AREA
453
HEIGHT
310
01-Aug-2023
21:03



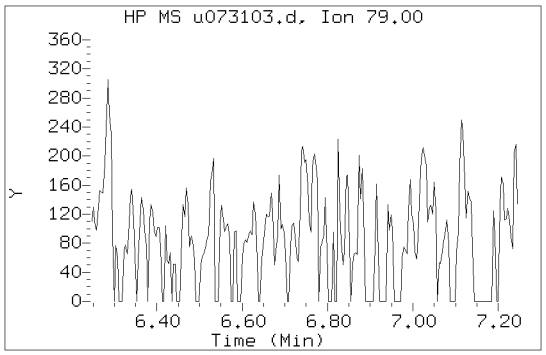
AFTER
MASS
94
AREA
453
HEIGHT
310
01-Aug-2023
21:03



BEFORE
MASS
79
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
79
AREA
0
HEIGHT
0
01-Aug-2023
21:03

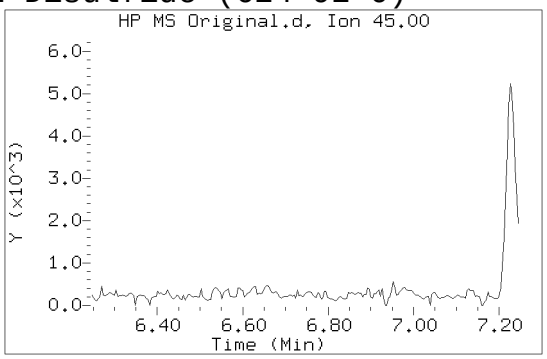


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073103.d
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InstruID : VOA9.i
LabSampID : VSTD000.5

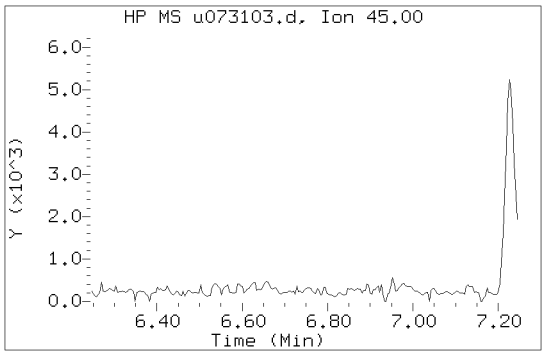
Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE
MASS
45
AREA
0
HEIGHT
0
01-Aug-2023
21:03



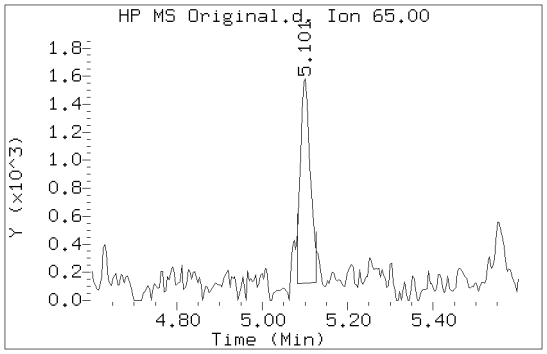
AFTER
MASS
45
AREA
0
HEIGHT
0
01-Aug-2023
21:03



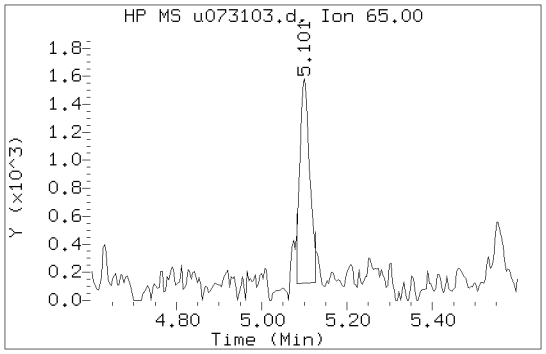
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

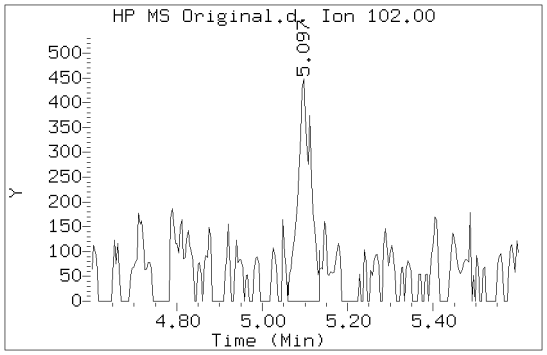
BEFORE
MASS
65
AREA
2440
HEIGHT
1461
01-Aug-2023
21:03



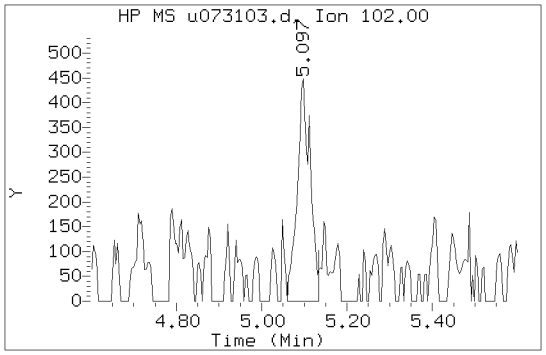
AFTER
MASS
65
AREA
2440
HEIGHT
1461
01-Aug-2023
21:03



BEFORE
MASS
102
AREA
961
HEIGHT
448
01-Aug-2023
21:03



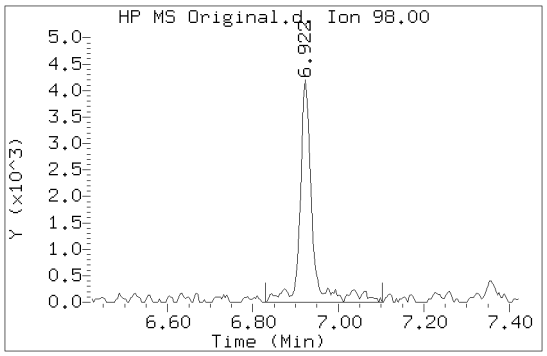
AFTER
MASS
102
AREA
961
HEIGHT
448
01-Aug-2023
21:03



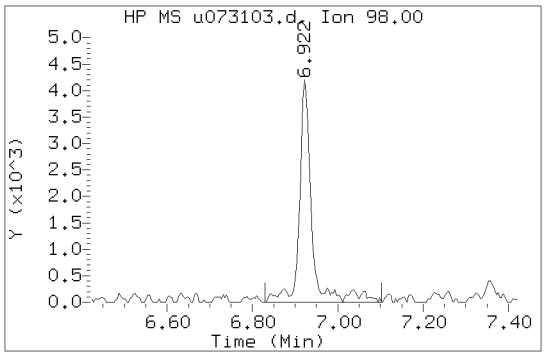
Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
8612
HEIGHT
4202
01-Aug-2023
21:03



AFTER
MASS
98
AREA
8612
HEIGHT
4202
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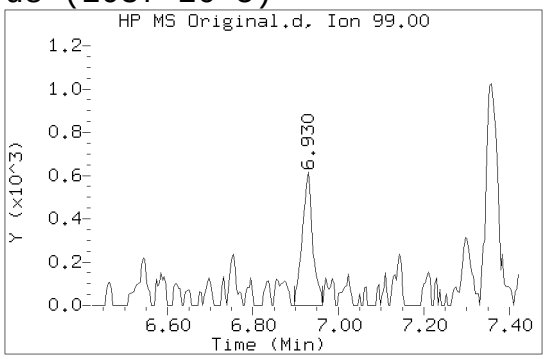


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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

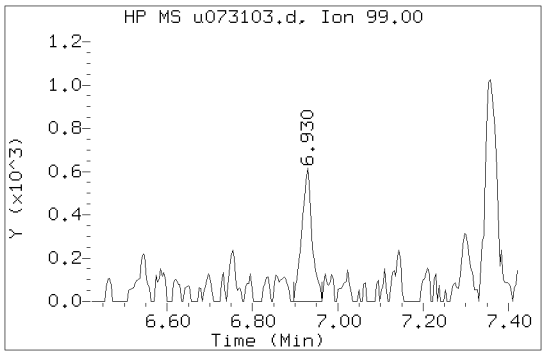
Toluene-d8 (2037-26-5)

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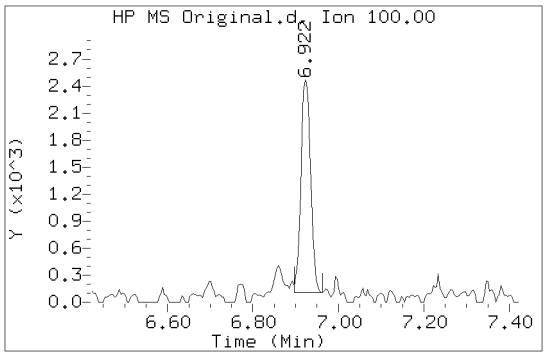
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21:03



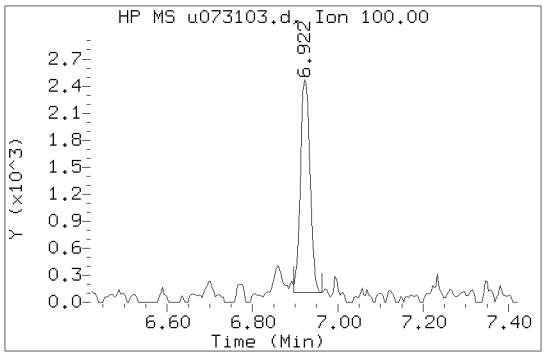
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21:03



BEFORE
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01-Aug-2023
21:03



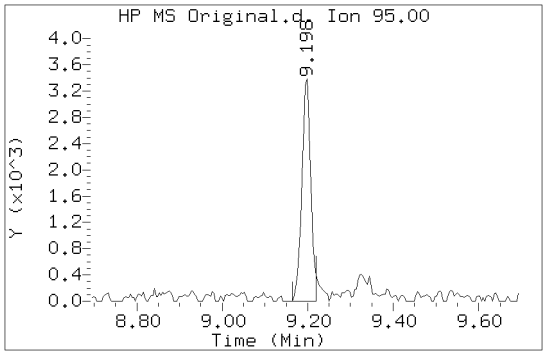
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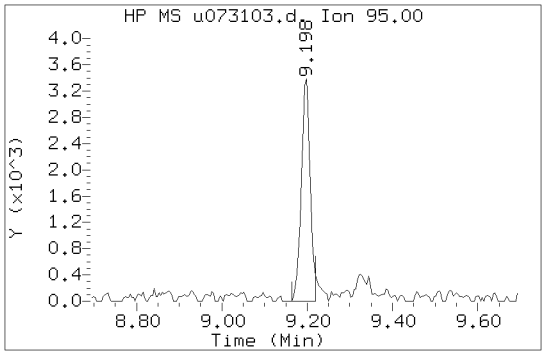
4-Bromofluorobenzene (460-00-4)

Reason Code:

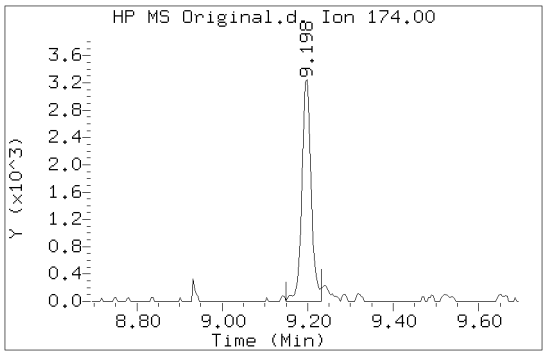
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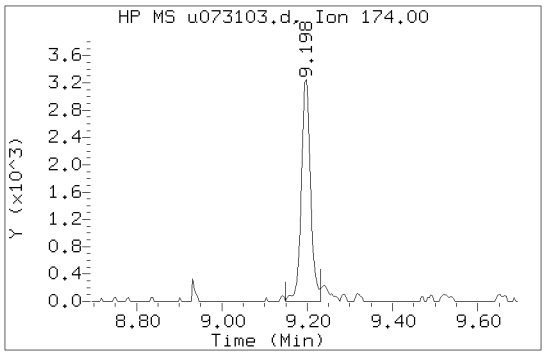
AFTER
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95
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3385
01-Aug-2023
21:03



BEFORE
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AREA
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AFTER
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01-Aug-2023
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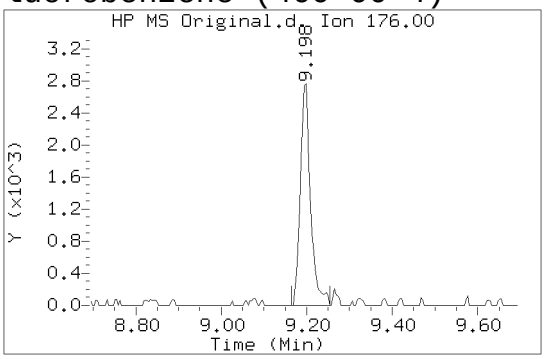
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Inj Date : 31-JUL-2023 11:53
InstruID : VOA9.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

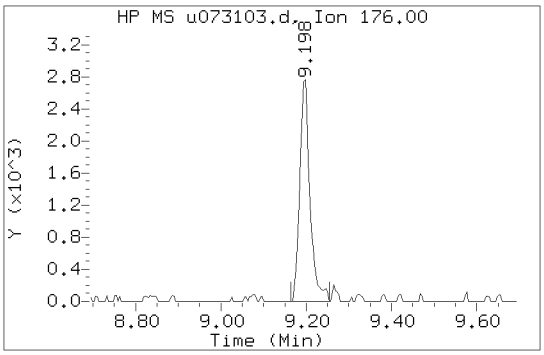
BEFORE

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21:03



AFTER

MASS
176
AREA
4704
HEIGHT
2764
01-Aug-2023
21:03



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073104.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073104.D
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Inj Date : 31-JUL-2023 12:37
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V9;WATER;0;1;
Comment :
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Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 11:53 Cal File: U073103.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	481982	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	5086	1.00000	2.33
3	Chloromethane	50	1.295	1.295	(0.269)	7212	1.00000	0.93(M)
5	Vinyl Chloride	62	1.374	1.374	(0.285)	4568	1.00000	0.96(M)
6	Bromomethane	94	1.621	1.621	(0.337)	3816	1.00000	(M)
7	Chloroethane	64	1.696	1.696	(0.352)	3276	1.00000	1.09(M)
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	6084	1.00000	1.03
9	Acrolein	56	1.745	1.745	(0.362)	644	2.00000	2.08(M)
10	Acetone	43	2.412	2.412	(0.501)	8968	2.00000	
11	1,1-Dichloroethene	96	2.326	2.326	(0.483)	3226	1.00000	1.01
15	Iodomethane	142	2.465	2.465	(0.512)	4529	2.00000	4.92
16	Acrylonitrile	53	3.068	3.068	(0.637)	3315	2.00000	2.18
17	Methylene Chloride	84	2.795	2.795	(0.580)	5208	1.00000	1.16(M)
18	Methyl tert-butyl ether	73	3.080	3.080	(0.640)	9734	1.00000	0.99
19	Carbon Disulfide	76	2.517	2.517	(0.523)	18852	2.00000	2.03
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.634)	3954	1.00000	1.11(M)
21	Vinyl Acetate	43	3.608	3.608	(0.749)	20488	2.00000	2.01
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	7192	1.00000	1.10
24	2-Butanone	43	4.272	4.272	(0.887)	4157	2.00000	2.19(M)
26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	4894	1.00000	1.09

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	3710	1.00000	0.93
28 Chloroform	83	4.568	4.568 (0.949)	7814	1.00000	1.03

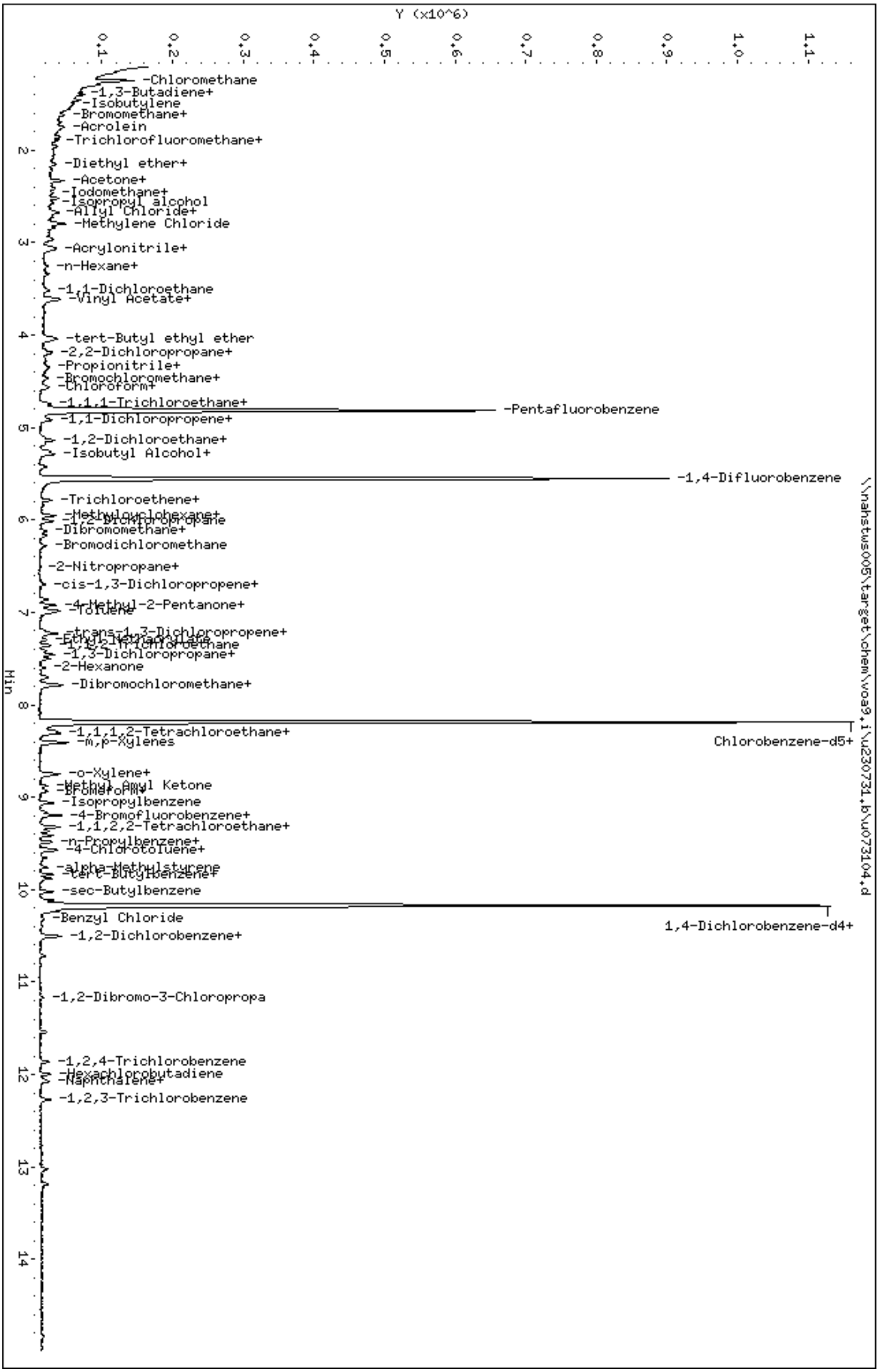
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	2534	1.00000	1.07
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	4835	1.00000	0.28(M)
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	6007	1.00000	1.02
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	5376	1.00000	1.03
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	5883	1.00000	0.97
	34 Carbon Tetrachloride	117	4.905	4.905	(0.883)	4063	1.00000	0.87(M)
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	4638	1.00000	(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	698381	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	17734	1.00000	1.03
	38 Trichloroethene	130	5.786	5.786	(1.042)	4551	1.00000	0.94
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	5449	1.00000	0.99(M)
	41 2-Chloroethylvinyl ether	63	6.570	6.570	(1.183)	186	2.00000	1.27(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	4459	1.00000	0.97
	44 Dibromomethane	93	6.120	6.120	(1.102)	2988	1.00000	1.01
	45 4-Methyl-2-Pentanone	43	6.862	6.862	(0.838)	9432	2.00000	2.00
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	4923	1.00000	2.87
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	632152	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	16097	1.00000	1.09(M)
	50 Toluene	91	6.982	6.982	(0.853)	15432	1.00000	0.89
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	4497	1.00000	0.85(M)
	52 2-Hexanone	43	7.597	7.597	(0.928)	5652	2.00000	1.81
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	4495	1.00000	1.22
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	7484	1.00000	0.99
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	4226	1.00000	0.93
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	4459	1.00000	1.06
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	4540	1.00000	1.02
	58 1-Chlorohexane	55	8.193	8.193	(1.475)	3774	1.00000	1.03(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	12525	1.00000	1.02
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	4248	1.00000	0.95
	61 Ethylbenzene	106	8.309	8.309	(1.015)	4942	1.00000	0.89
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	11533	2.00000	1.78
	63 o-Xylene	106	8.748	8.748	(1.069)	5188	1.00000	0.81
	64 Styrene	104	8.763	8.763	(1.071)	7936	1.00000	0.80
	66 Bromoform	173	8.920	8.920	(1.090)	2750	1.00000	0.87(T)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	13094	1.00000	0.85(M)
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	6620	1.00000	1.10
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	8707	1.00000	0.17
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	310102	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	5273	1.00000	1.01
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	13048	1.00000	2.36
	74 Bromobenzene	156	9.317	9.317	(0.916)	5491	1.00000	1.07
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	9434	1.00000	0.87(M)
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	10416	1.00000	0.95
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	10861	1.00000	0.88
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	8179	1.00000	0.79
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	9334	1.00000	0.85
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	11030	1.00000	0.39(M)
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	9596	1.00000	0.38(M)
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	8349	1.00000	0.97
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	10783	1.00000	1.13
	87 n-Butylbenzene	91	10.498	10.498	(1.032)	8159	1.00000	3.13(M)
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	9516	1.00000	1.08

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	937	1.00000	1.08(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	4848	1.00000	0.89

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	2531	1.00000	0.14(M)
	92 Naphthalene	128	12.073	12.073	(1.187)	11725	1.00000	2.38
	93 1,2,3-Trichlorobenzene	180	12.275	12.275	(1.207)	4718	1.00000	0.85
M	94 1,2-Dichloroethylene (total)	96				7664	2.00000	
M	95 Xylenes (total)	106				16721	3.00000	
	135 1,4-Dioxane	88	6.180	6.180	(1.283)	1547	20.0000	22.38(M)
	141 Cyclohexane	56	4.778	4.778	(0.992)	5131	1.00000	0.94(MH)
	138 Freon TF	101	2.334	2.334	(0.485)	3343	1.00000	0.31
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	3484	1.00000	0.90
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	9557	1.00000	0.93
	146 Methyl Acetate	43	2.712	2.712	(0.563)	3863	1.00000	1.11(M)
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	11049	20.0000	24.23(aM)
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	6059	20.0000	22.74(M)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\nahstws005\target\chem\voa9,i\u230731,b\u073104,d
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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

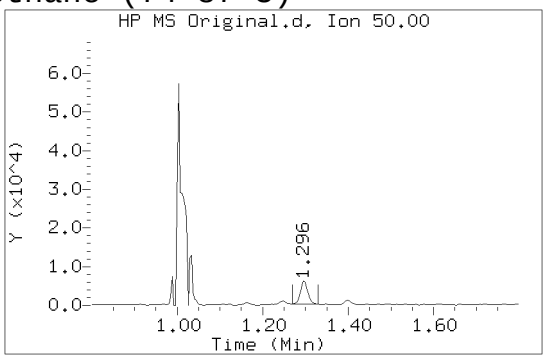
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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

Chloromethane (74-87-3)

Reason Code:

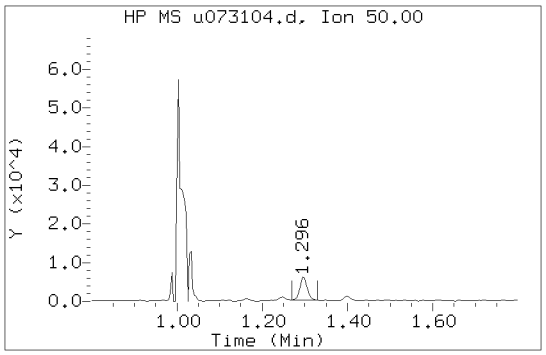
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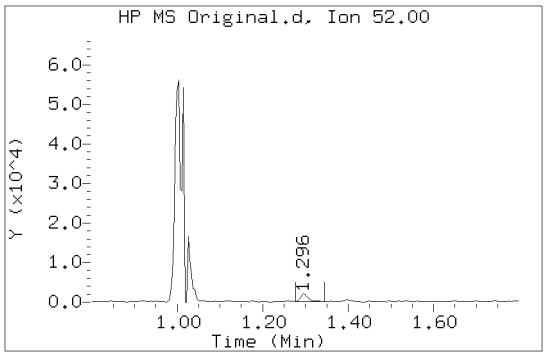
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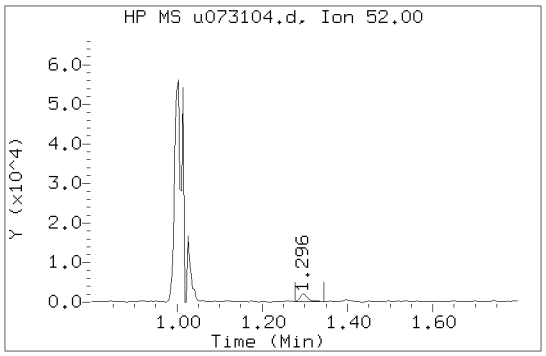
BEFORE

MASS
52
AREA
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01-Aug-2023
21:03



AFTER

MASS
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AREA
2568
HEIGHT
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01-Aug-2023
21:03

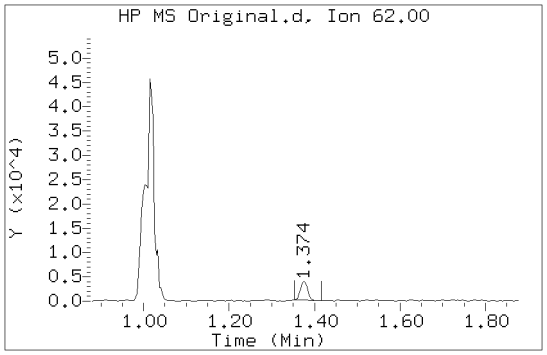


Vinyl Chloride (75-01-4)

Reason Code:

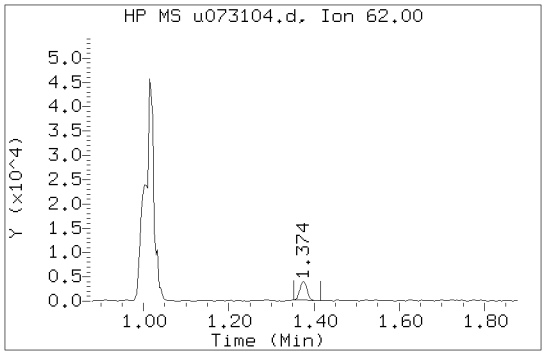
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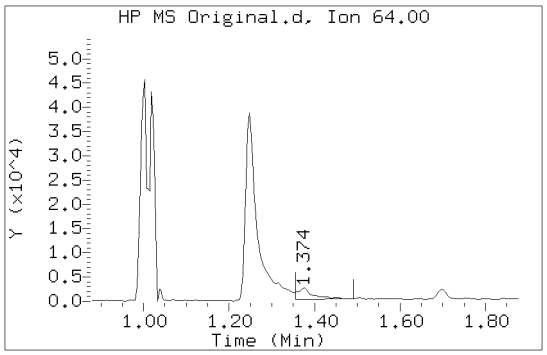
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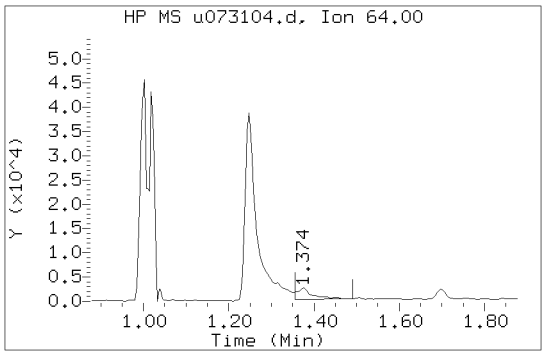
BEFORE

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AFTER

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21:03

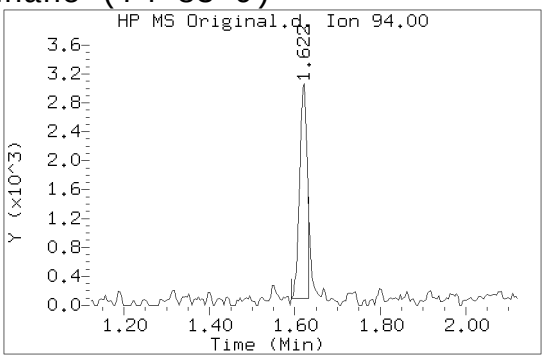


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InstruID : VOA9.i
LabSampID : VSTD001

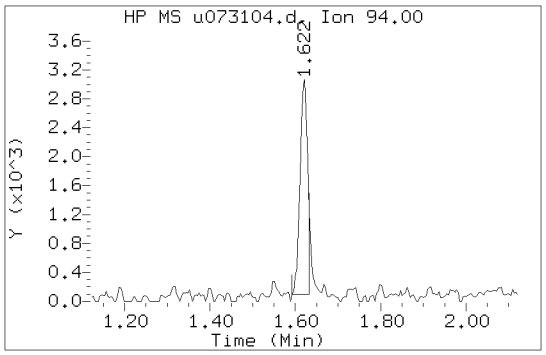
Bromomethane (74-83-9)

Reason Code:

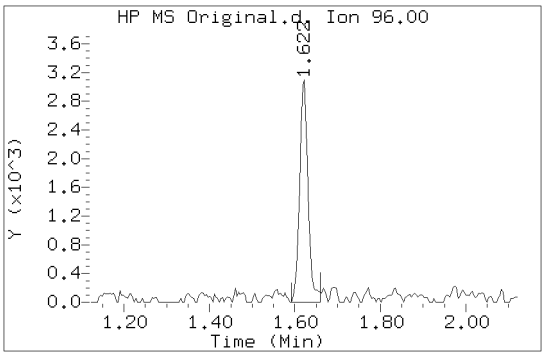
BEFORE
MASS
94
AREA
3816
HEIGHT
2971
01-Aug-2023
21:03



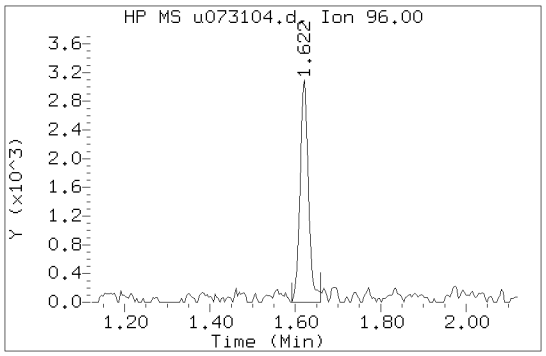
AFTER
MASS
94
AREA
3816
HEIGHT
2971
01-Aug-2023
21:03



BEFORE
MASS
96
AREA
4382
HEIGHT
3098
01-Aug-2023
21:03



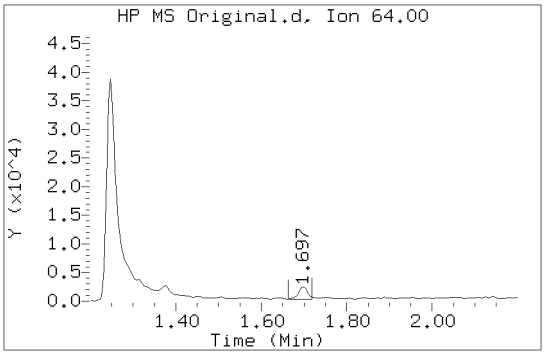
AFTER
MASS
96
AREA
4382
HEIGHT
3098
01-Aug-2023
21:03



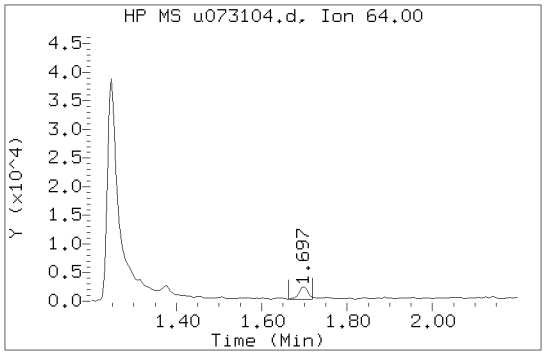
Chloroethane (75-00-3)

Reason Code:

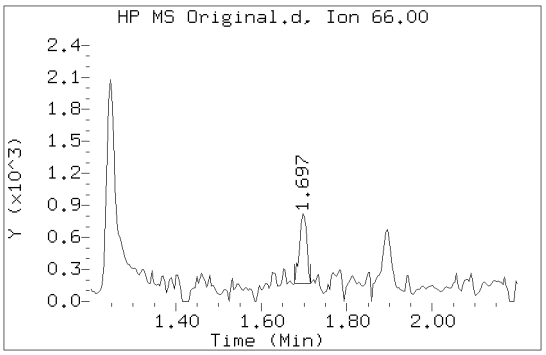
BEFORE
MASS
64
AREA
3276
HEIGHT
2153
01-Aug-2023
21:03



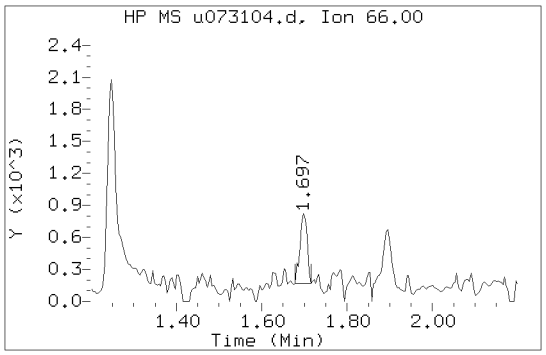
AFTER
MASS
64
AREA
3276
HEIGHT
2153
01-Aug-2023
21:03



BEFORE
MASS
66
AREA
785
HEIGHT
658
01-Aug-2023
21:03



AFTER
MASS
66
AREA
785
HEIGHT
658
01-Aug-2023
21:03

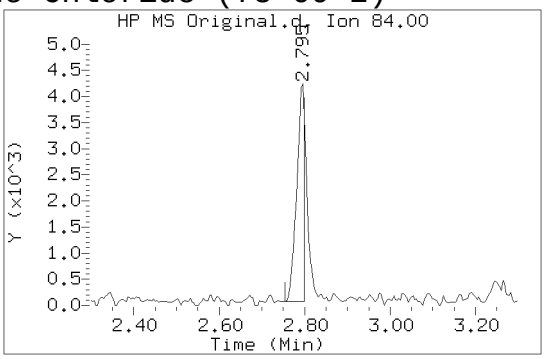


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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

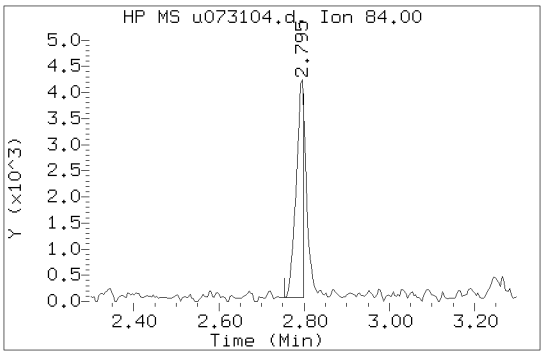
Methylene Chloride (75-09-2)

Reason Code:

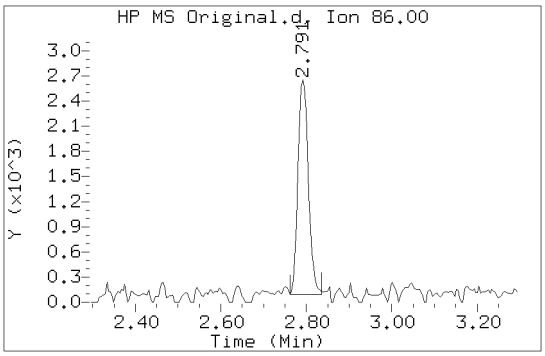
BEFORE
MASS
84
AREA
5208
HEIGHT
4165
01-Aug-2023
21:03



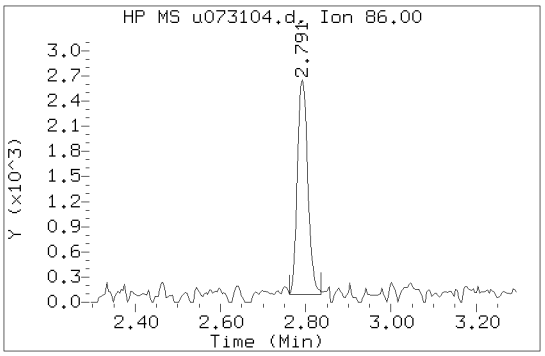
AFTER
MASS
84
AREA
5208
HEIGHT
4165
01-Aug-2023
21:03



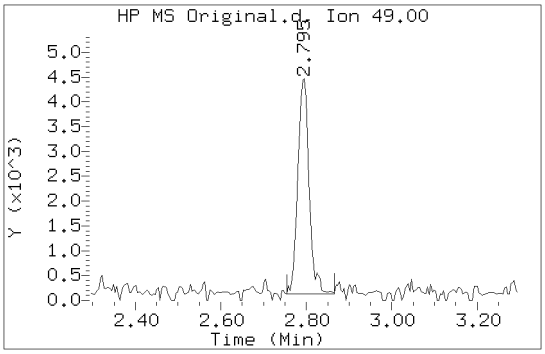
BEFORE
MASS
86
AREA
4420
HEIGHT
2560
01-Aug-2023
21:03



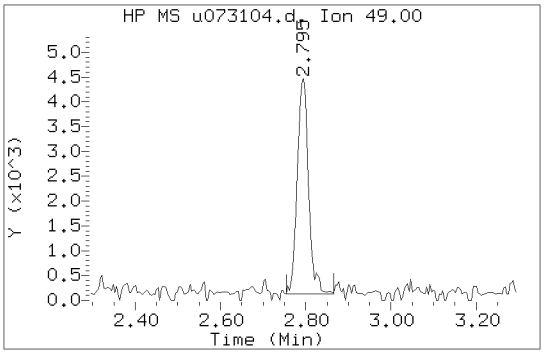
AFTER
MASS
86
AREA
4420
HEIGHT
2560
01-Aug-2023
21:03



BEFORE
MASS
49
AREA
8151
HEIGHT
4339
01-Aug-2023
21:03



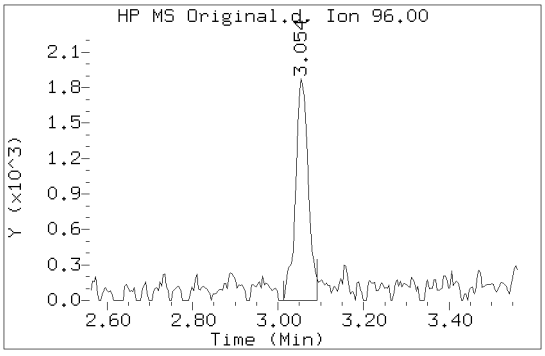
AFTER
MASS
49
AREA
8151
HEIGHT
4339
01-Aug-2023
21:03



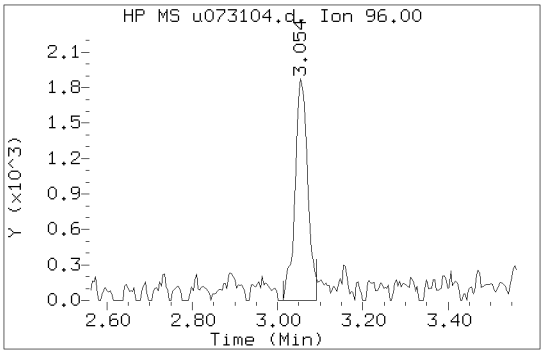
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
96
AREA
3954
HEIGHT
1876
01-Aug-2023
21:03



AFTER
MASS
96
AREA
3954
HEIGHT
1876
01-Aug-2023
21:03

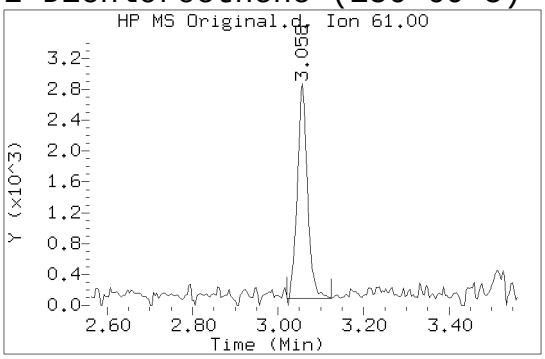


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InstruID : VOA9.i
LabSampID : VSTD001

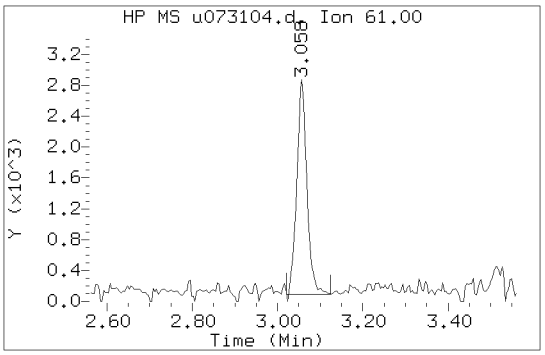
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

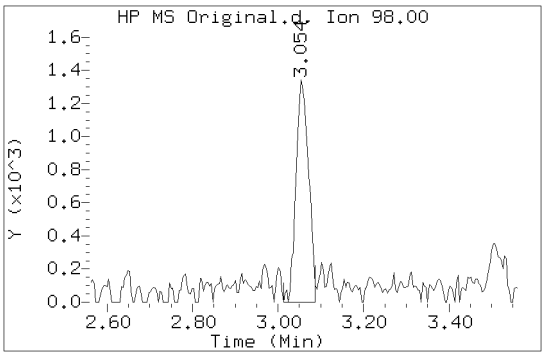
BEFORE
MASS
61
AREA
4661
HEIGHT
2779
01-Aug-2023
21:03



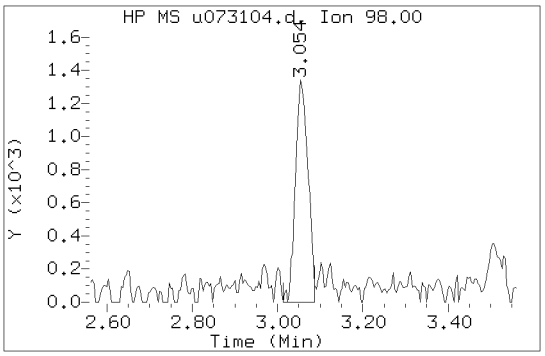
AFTER
MASS
61
AREA
4661
HEIGHT
2779
01-Aug-2023
21:03



BEFORE
MASS
98
AREA
2813
HEIGHT
1342
01-Aug-2023
21:03



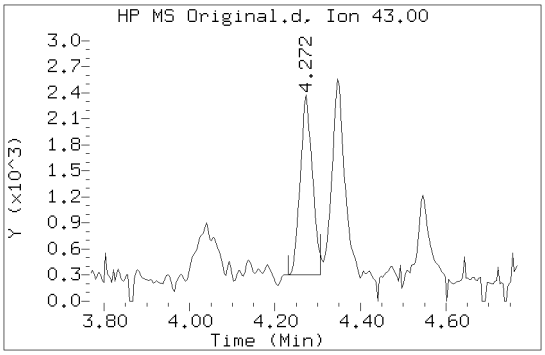
AFTER
MASS
98
AREA
2813
HEIGHT
1342
01-Aug-2023
21:03



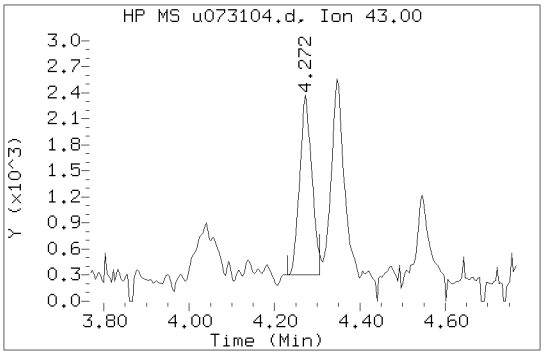
2-Butanone (78-93-3)

Reason Code:

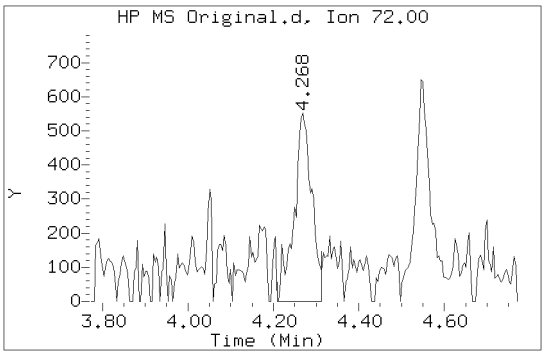
BEFORE
MASS
43
AREA
4157
HEIGHT
2066
01-Aug-2023
21:03



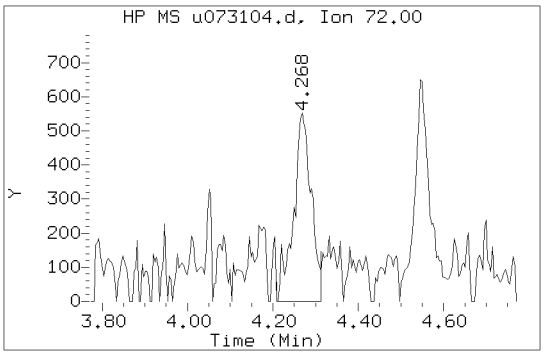
AFTER
MASS
43
AREA
4157
HEIGHT
2066
01-Aug-2023
21:03



BEFORE
MASS
72
AREA
1609
HEIGHT
552
01-Aug-2023
21:03



AFTER
MASS
72
AREA
1609
HEIGHT
552
01-Aug-2023
21:03

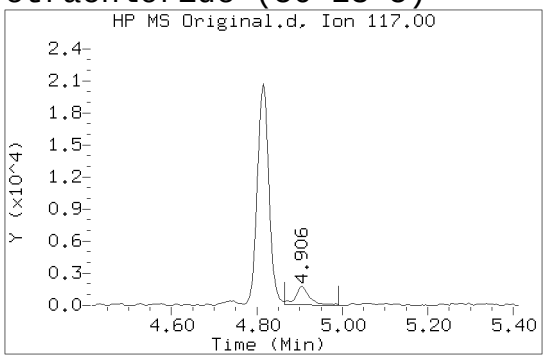


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Inj Date : 31-JUL-2023 12:37
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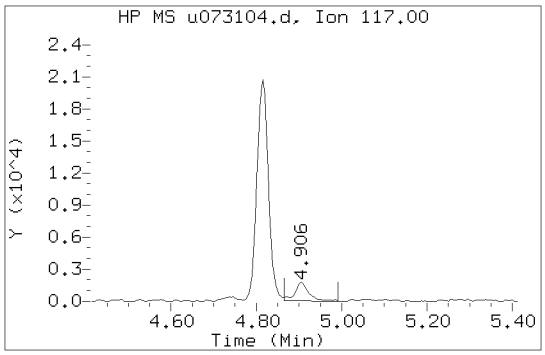
Carbon Tetrachloride (56-23-5)

Reason Code:

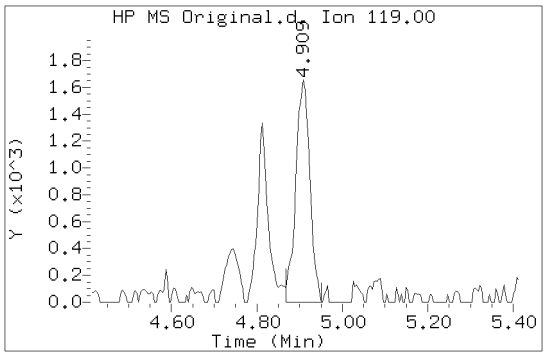
BEFORE
MASS
117
AREA
4063
HEIGHT
1728
01-Aug-2023
21:03



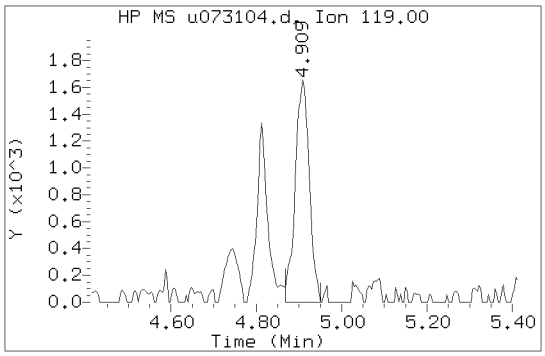
AFTER
MASS
117
AREA
4063
HEIGHT
1728
01-Aug-2023
21:03



BEFORE
MASS
119
AREA
3865
HEIGHT
1656
01-Aug-2023
21:03



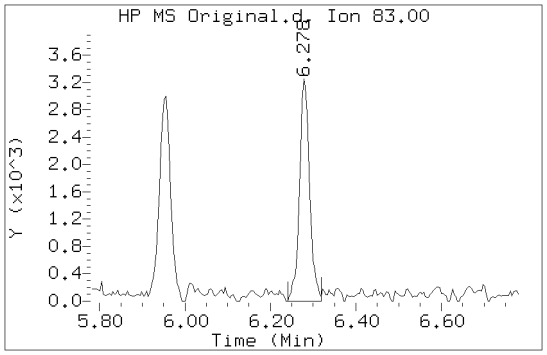
AFTER
MASS
119
AREA
3865
HEIGHT
1656
01-Aug-2023
21:03



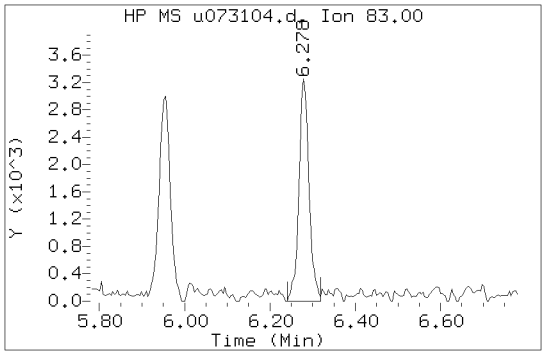
Bromodichloromethane (75-27-4)

Reason Code:

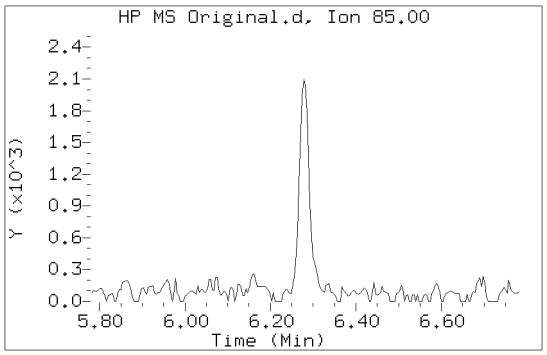
BEFORE
MASS
83
AREA
5449
HEIGHT
3254
01-Aug-2023
21:03



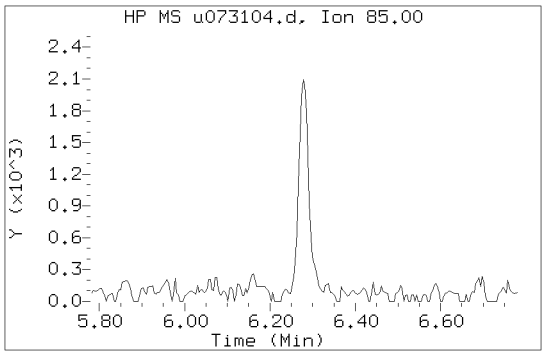
AFTER
MASS
83
AREA
5449
HEIGHT
3254
01-Aug-2023
21:03



BEFORE
MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
85
AREA
0
HEIGHT
0
01-Aug-2023
21:03

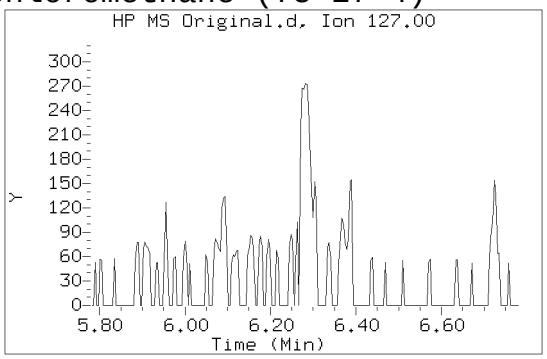


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LabSampID : VSTD001

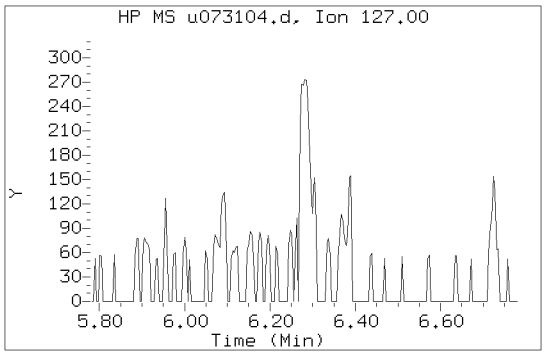
Bromodichloromethane (75-27-4)

Reason Code:

BEFORE
MASS
127
AREA
0
HEIGHT
0
01-Aug-2023
21:03



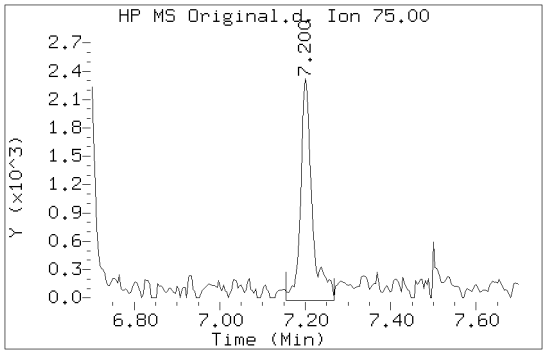
AFTER
MASS
127
AREA
0
HEIGHT
0
01-Aug-2023
21:03



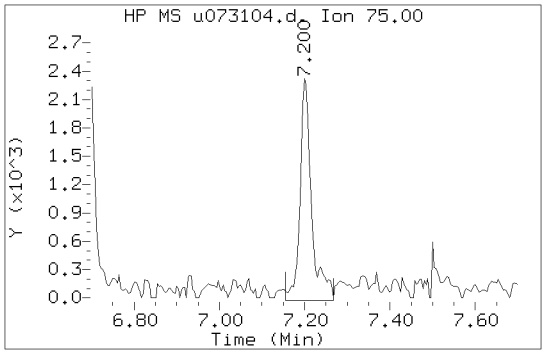
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

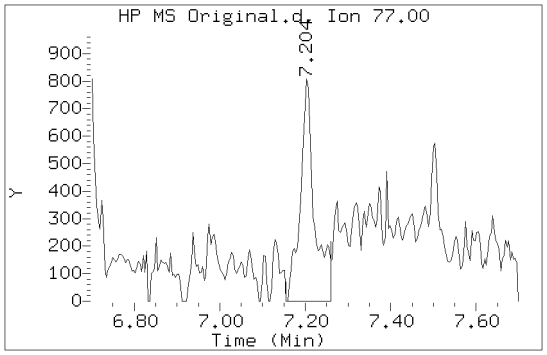
BEFORE
MASS
75
AREA
4497
HEIGHT
2346
01-Aug-2023
21:03



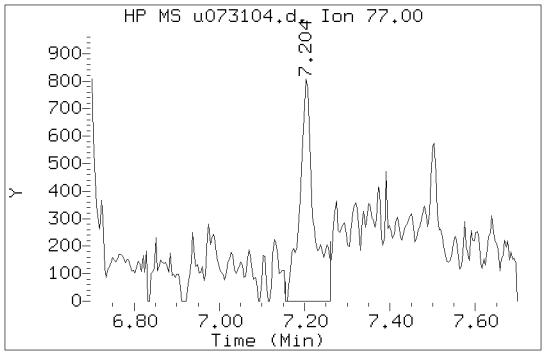
AFTER
MASS
75
AREA
4497
HEIGHT
2346
01-Aug-2023
21:03



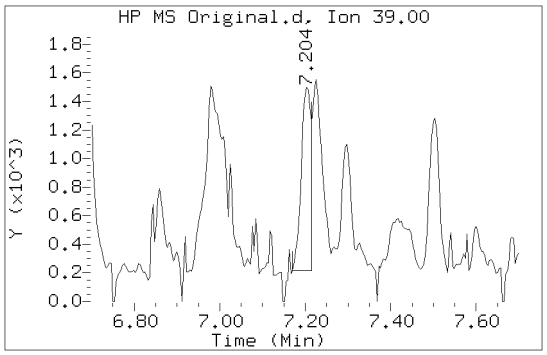
BEFORE
MASS
77
AREA
1896
HEIGHT
808
01-Aug-2023
21:03



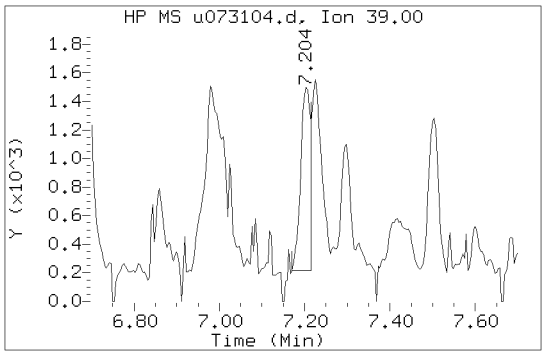
AFTER
MASS
77
AREA
1896
HEIGHT
808
01-Aug-2023
21:03



BEFORE
MASS
39
AREA
2085
HEIGHT
1283
01-Aug-2023
21:03



AFTER
MASS
39
AREA
2085
HEIGHT
1283
01-Aug-2023
21:03

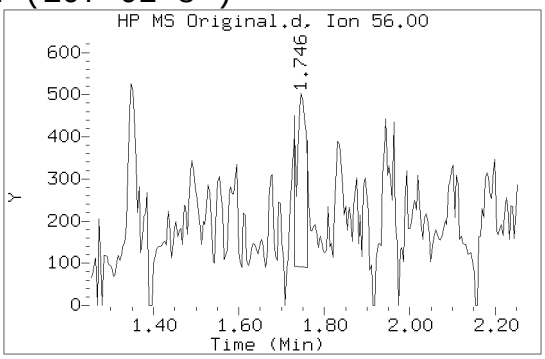


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LabSampID : VSTD001

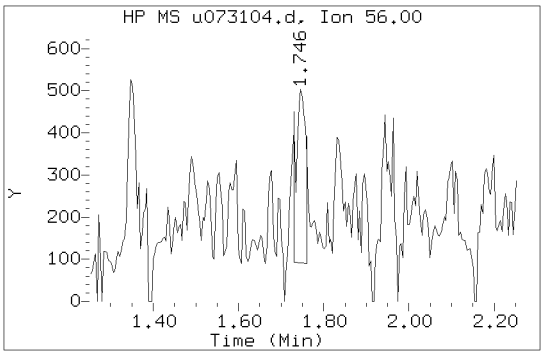
Acrolein (107-02-8)

Reason Code:

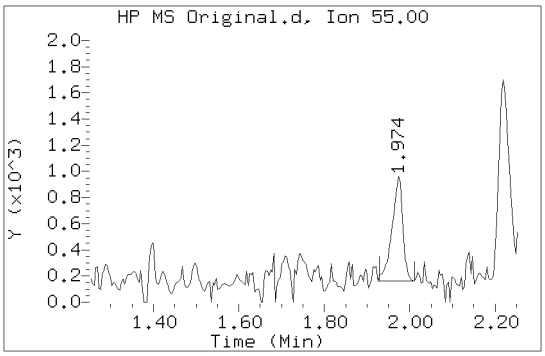
BEFORE
MASS
56
AREA
644
HEIGHT
412
01-Aug-2023
21:03



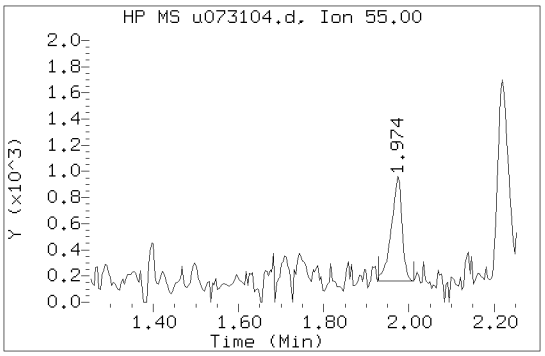
AFTER
MASS
56
AREA
644
HEIGHT
412
01-Aug-2023
21:03



BEFORE
MASS
55
AREA
1395
HEIGHT
799
01-Aug-2023
21:03



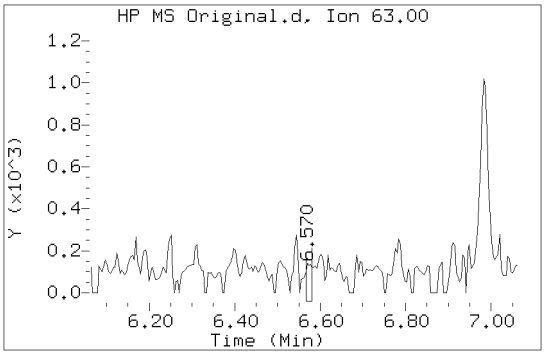
AFTER
MASS
55
AREA
1395
HEIGHT
799
01-Aug-2023
21:03



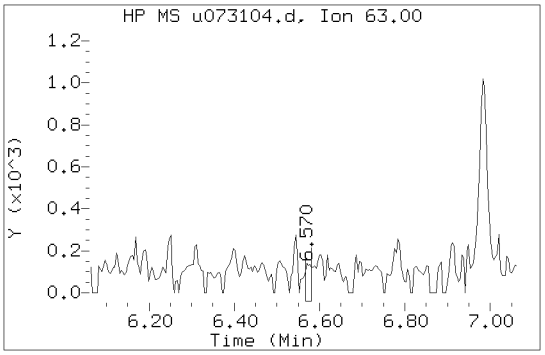
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

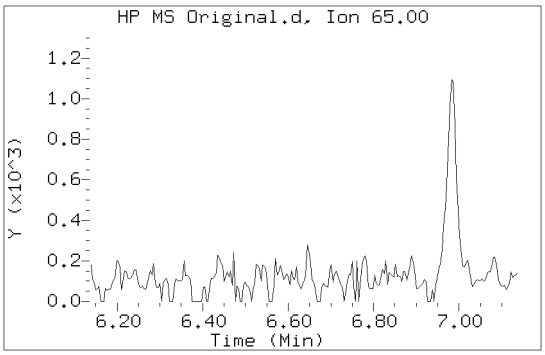
BEFORE
MASS
63
AREA
186
HEIGHT
180
01-Aug-2023
21:03



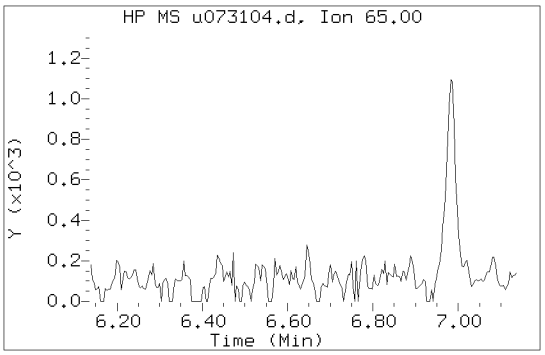
AFTER
MASS
63
AREA
186
HEIGHT
180
01-Aug-2023
21:03



BEFORE
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03

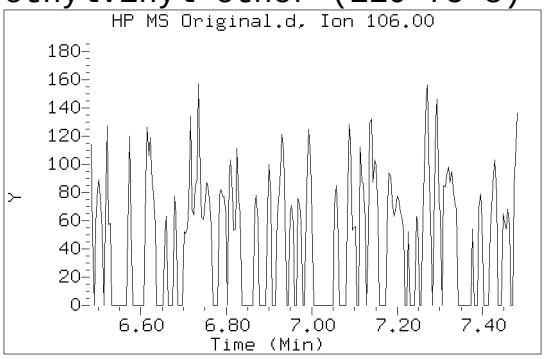


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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

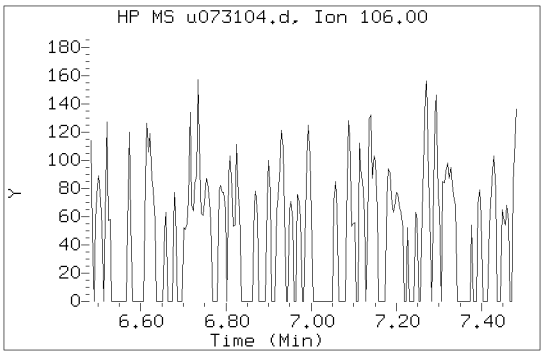
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03



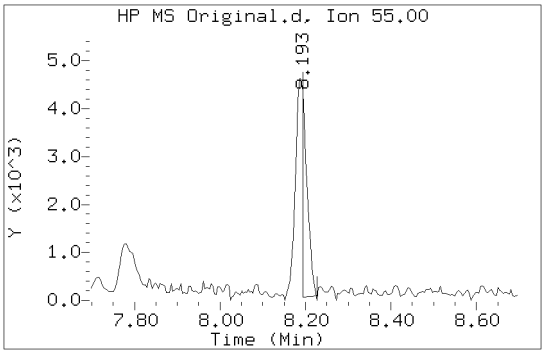
AFTER
MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03



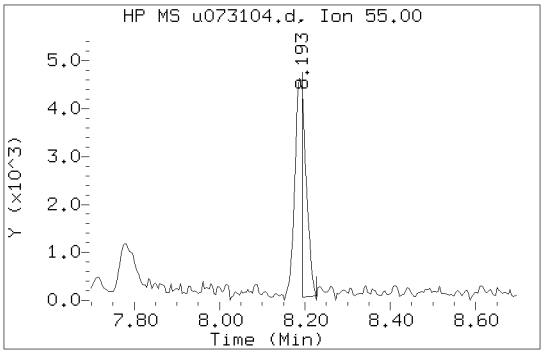
1-Chlorohexane (544-10-5)

Reason Code:

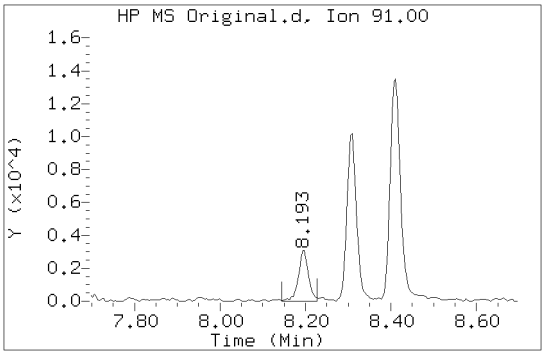
BEFORE
MASS
55
AREA
3774
HEIGHT
4298
01-Aug-2023
21:03



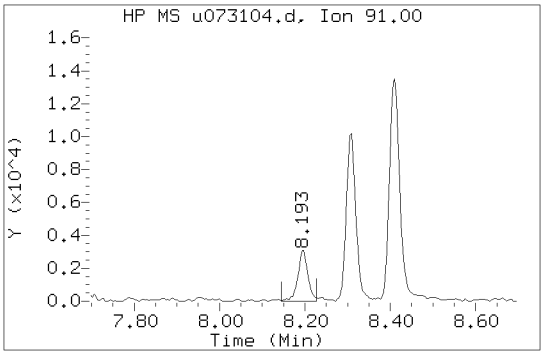
AFTER
MASS
55
AREA
3774
HEIGHT
4298
01-Aug-2023
21:03



BEFORE
MASS
91
AREA
5195
HEIGHT
3103
01-Aug-2023
21:03



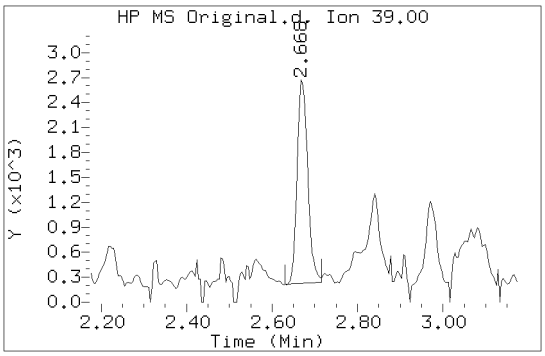
AFTER
MASS
91
AREA
5195
HEIGHT
3103
01-Aug-2023
21:03



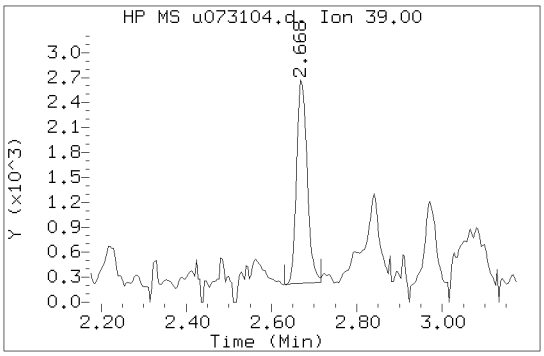
Acetonitrile (75-05-8)

Reason Code:

BEFORE
MASS
39
AREA
4337
HEIGHT
2446
01-Aug-2023
21:03



AFTER
MASS
39
AREA
4337
HEIGHT
2446
01-Aug-2023
21:03



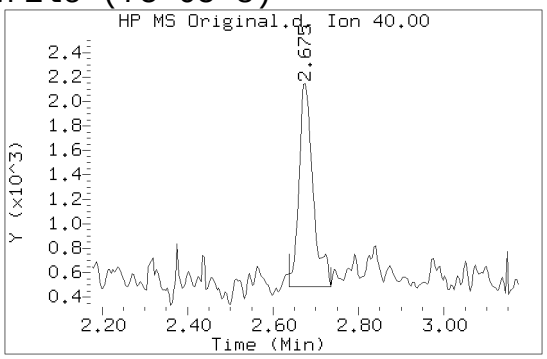
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

Acetonitrile (75-05-8)

Reason Code:

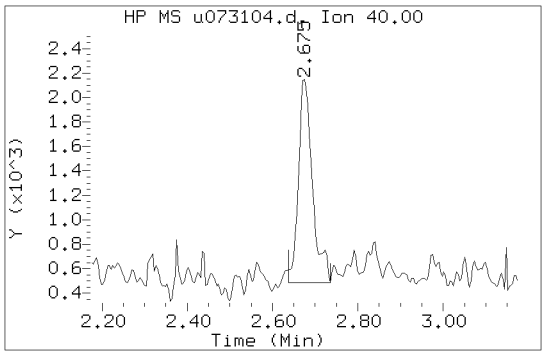
BEFORE

MASS
40
AREA
3852
HEIGHT
1660
01-Aug-2023
21:03



AFTER

MASS
40
AREA
3852
HEIGHT
1660
01-Aug-2023
21:03

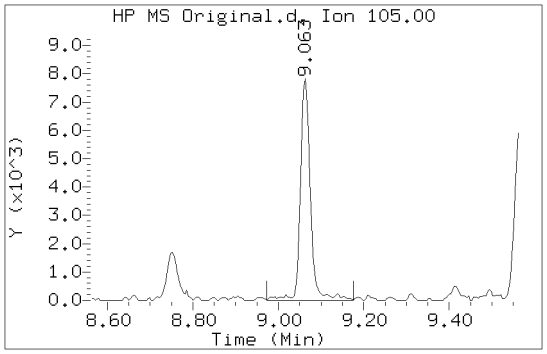


Isopropylbenzene (98-82-8)

Reason Code:

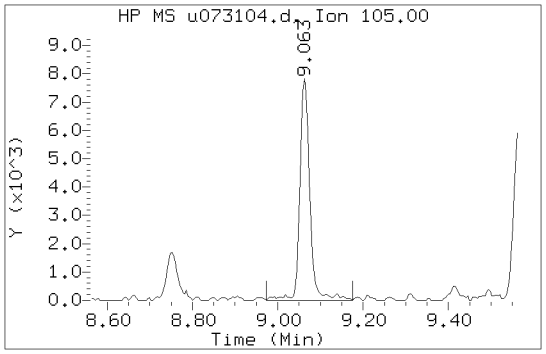
BEFORE

MASS
105
AREA
13094
HEIGHT
7826
01-Aug-2023
21:03



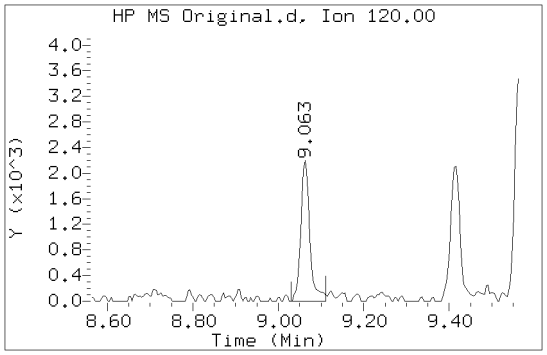
AFTER

MASS
105
AREA
13094
HEIGHT
7826
01-Aug-2023
21:03



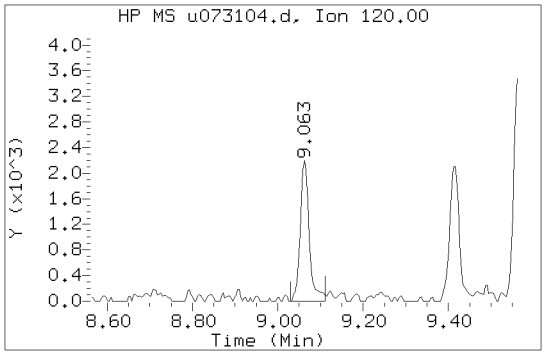
BEFORE

MASS
120
AREA
3316
HEIGHT
2197
01-Aug-2023
21:03



AFTER

MASS
120
AREA
3316
HEIGHT
2197
01-Aug-2023
21:03

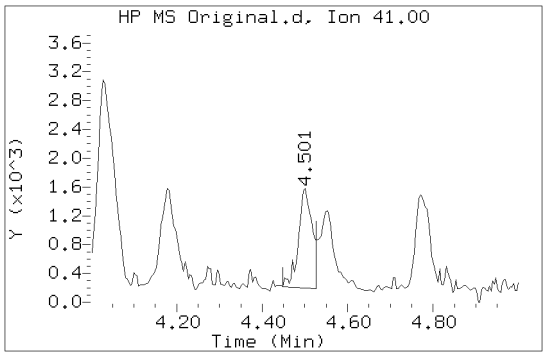


Methacrylonitrile (126-98-7)

Reason Code:

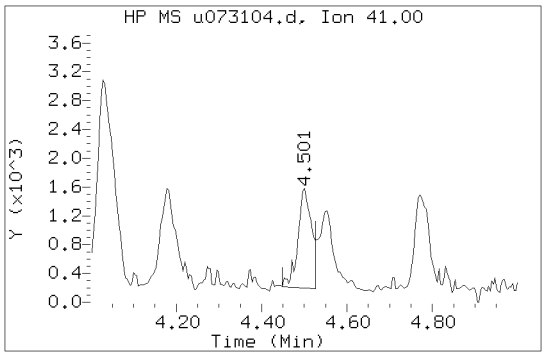
BEFORE

MASS
41
AREA
3171
HEIGHT
1385
01-Aug-2023
21:03



AFTER

MASS
41
AREA
3171
HEIGHT
1385
01-Aug-2023
21:03

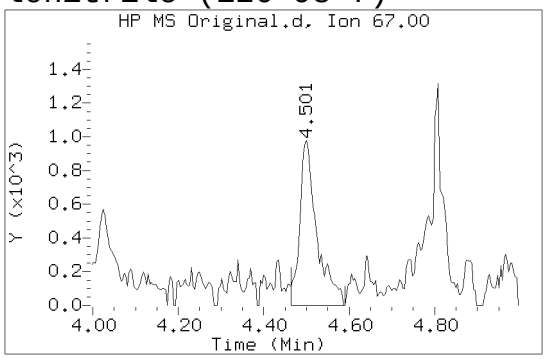


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

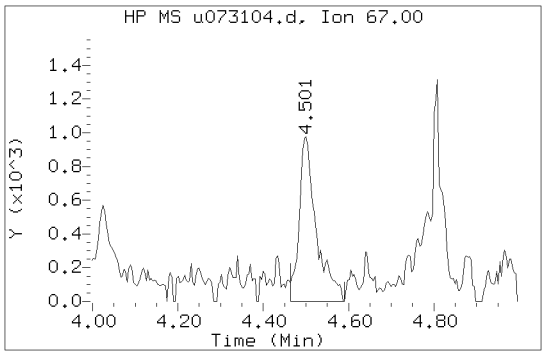
Methacrylonitrile (126-98-7)

Reason Code:

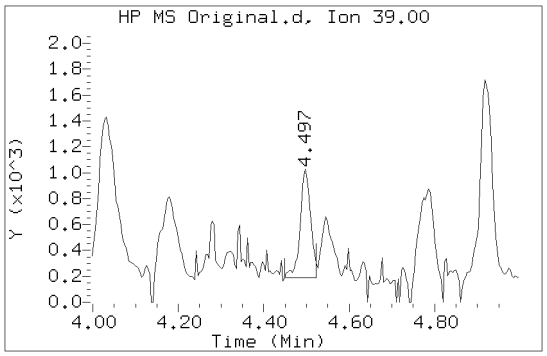
BEFORE
MASS
67
AREA
2773
HEIGHT
976
01-Aug-2023
21:03



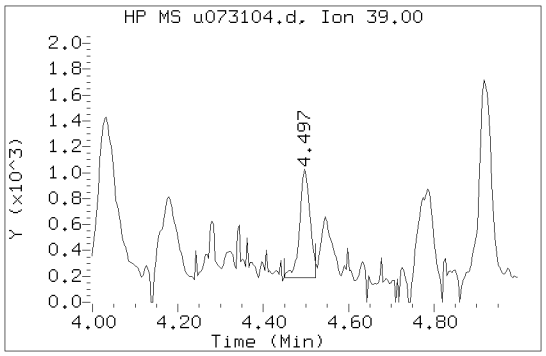
AFTER
MASS
67
AREA
2773
HEIGHT
976
01-Aug-2023
21:03



BEFORE
MASS
39
AREA
1452
HEIGHT
837
01-Aug-2023
21:03



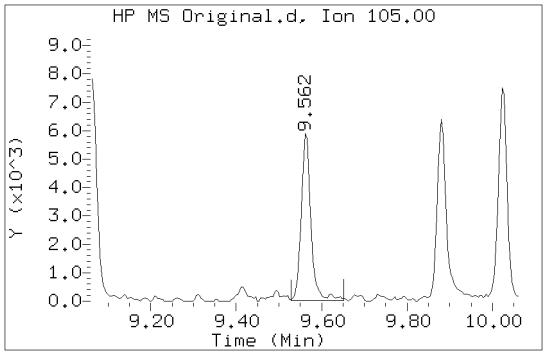
AFTER
MASS
39
AREA
1452
HEIGHT
837
01-Aug-2023
21:03



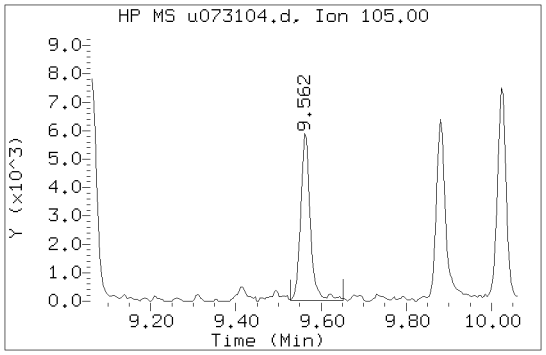
1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

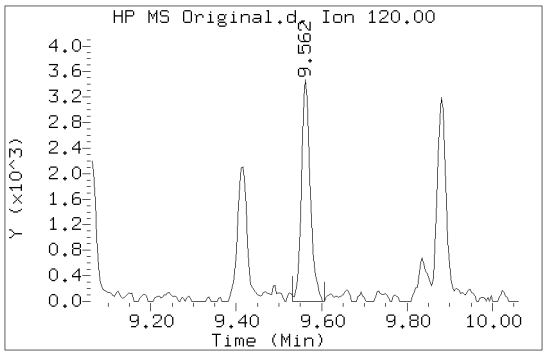
BEFORE
MASS
105
AREA
9434
HEIGHT
5884
01-Aug-2023
21:03



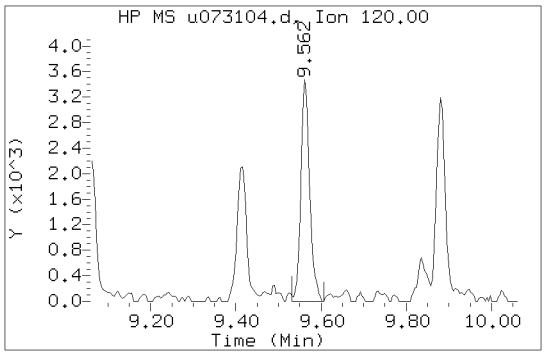
AFTER
MASS
105
AREA
9434
HEIGHT
5884
01-Aug-2023
21:03



BEFORE
MASS
120
AREA
5096
HEIGHT
3472
01-Aug-2023
21:03



AFTER
MASS
120
AREA
5096
HEIGHT
3472
01-Aug-2023
21:03

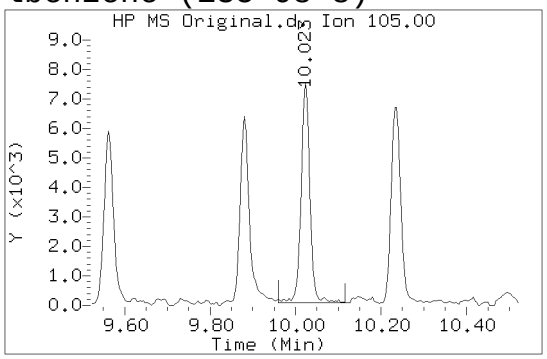


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LabSampID : VSTD001

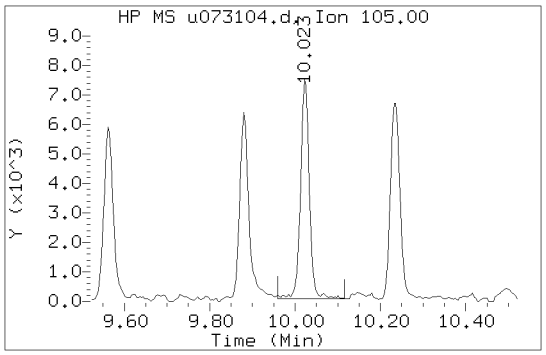
sec-Butylbenzene (135-98-8)

Reason Code:

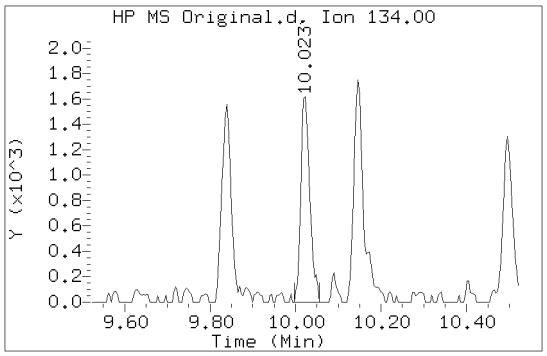
BEFORE
MASS
105
AREA
11030
HEIGHT
7439
01-Aug-2023
21:03



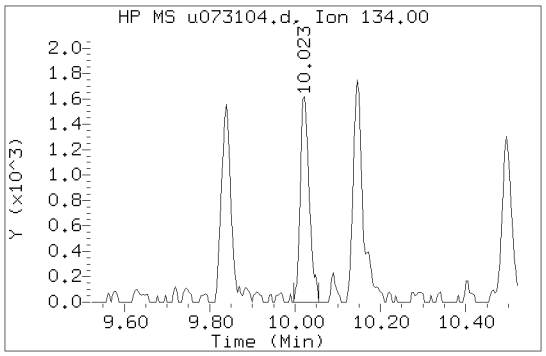
AFTER
MASS
105
AREA
11030
HEIGHT
7439
01-Aug-2023
21:03



BEFORE
MASS
134
AREA
2435
HEIGHT
1619
01-Aug-2023
21:03



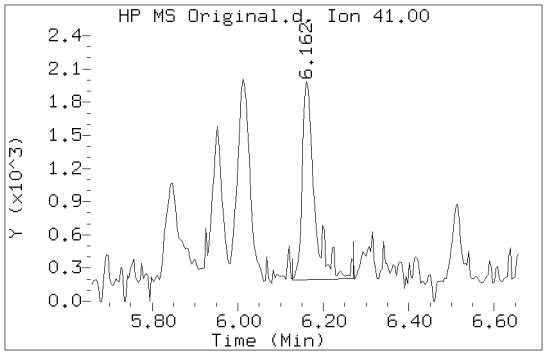
AFTER
MASS
134
AREA
2435
HEIGHT
1619
01-Aug-2023
21:03



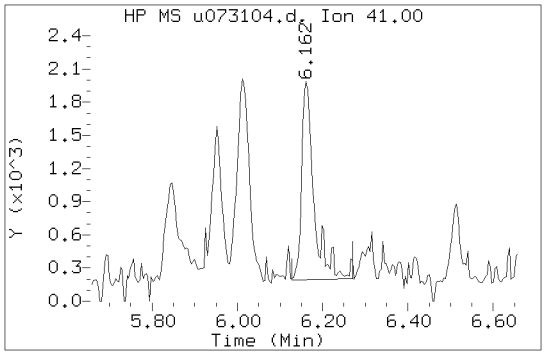
Methyl Methacrylate (80-62-6)

Reason Code:

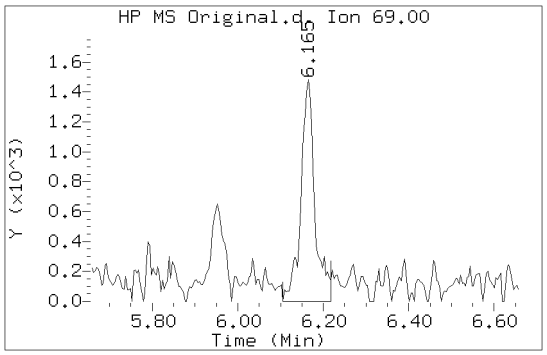
BEFORE
MASS
41
AREA
3713
HEIGHT
1791
01-Aug-2023
21:03



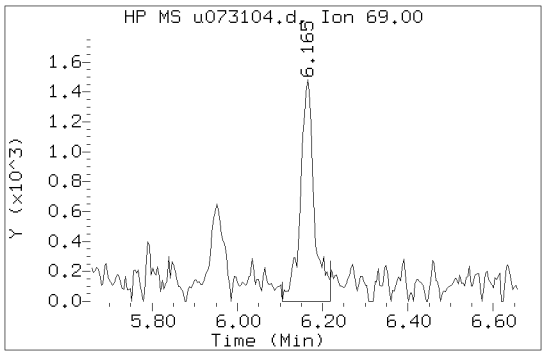
AFTER
MASS
41
AREA
3713
HEIGHT
1791
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
3388
HEIGHT
1482
01-Aug-2023
21:03



AFTER
MASS
69
AREA
3388
HEIGHT
1482
01-Aug-2023
21:03

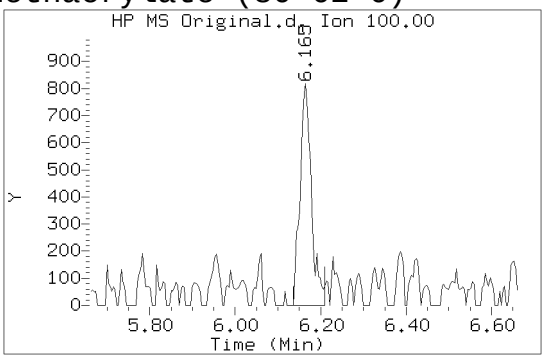


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

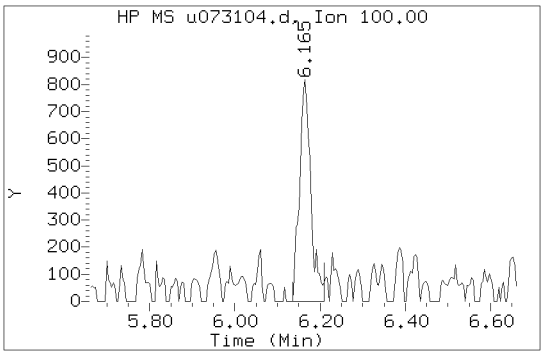
Methyl Methacrylate (80-62-6)

Reason Code:

BEFORE
MASS
100
AREA
1540
HEIGHT
818
01-Aug-2023
21:03



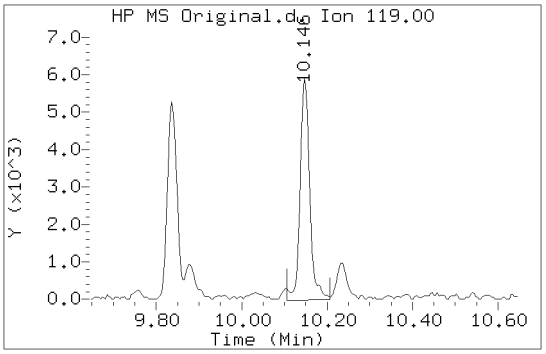
AFTER
MASS
100
AREA
1540
HEIGHT
818
01-Aug-2023
21:03



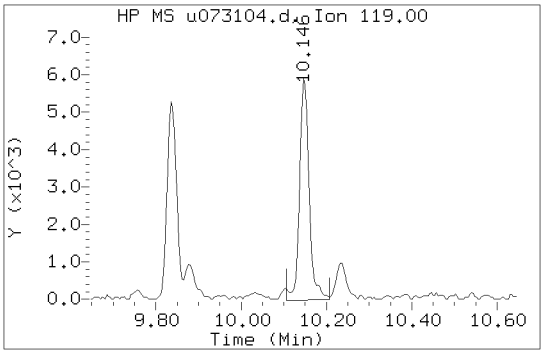
p-Isopropyltoluene (99-87-6)

Reason Code:

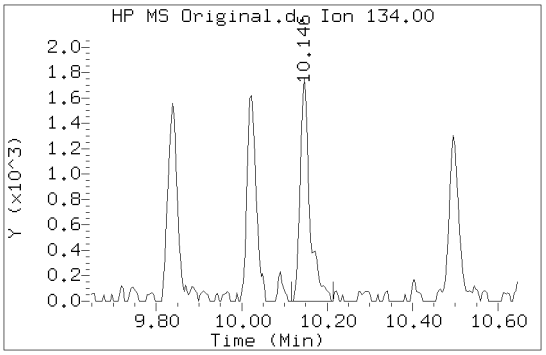
BEFORE
MASS
119
AREA
9596
HEIGHT
5914
01-Aug-2023
21:03



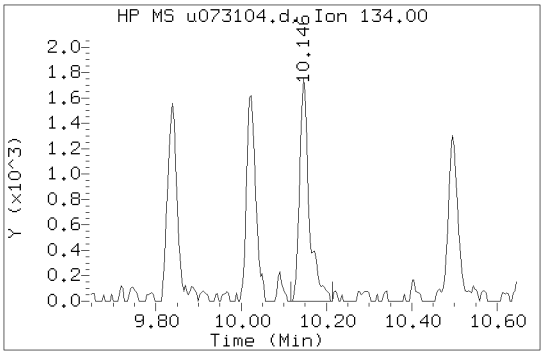
AFTER
MASS
119
AREA
9596
HEIGHT
5914
01-Aug-2023
21:03



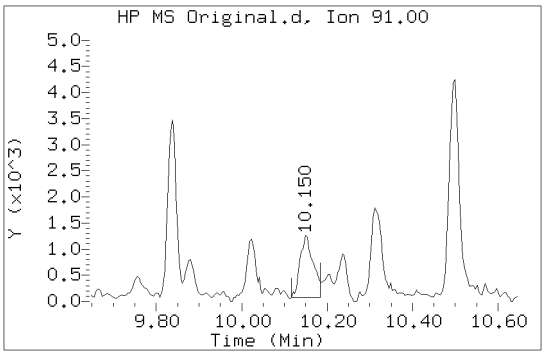
BEFORE
MASS
134
AREA
2851
HEIGHT
1749
01-Aug-2023
21:03



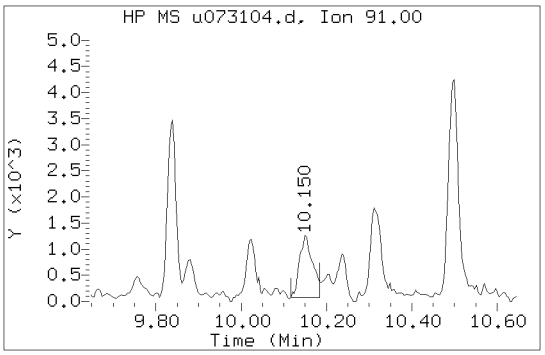
AFTER
MASS
134
AREA
2851
HEIGHT
1749
01-Aug-2023
21:03



BEFORE
MASS
91
AREA
2606
HEIGHT
1197
01-Aug-2023
21:03



AFTER
MASS
91
AREA
2606
HEIGHT
1197
01-Aug-2023
21:03



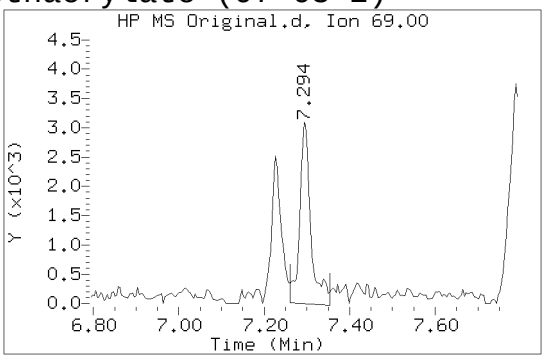
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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

Ethyl Methacrylate (97-63-2)

Reason Code:

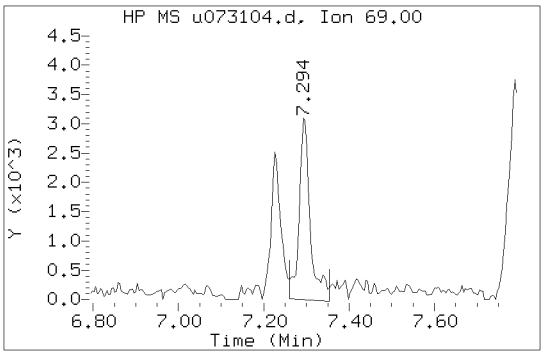
BEFORE

MASS
69
AREA
5777
HEIGHT
3094
01-Aug-2023
21:03



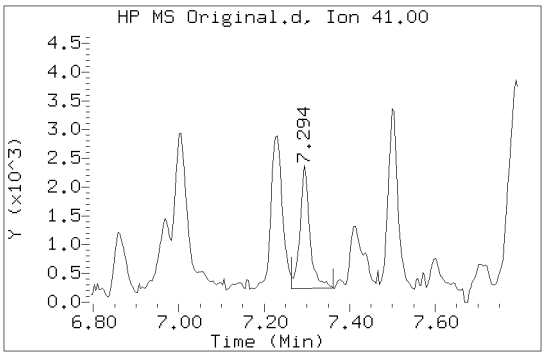
AFTER

MASS
69
AREA
5777
HEIGHT
3094
01-Aug-2023
21:03



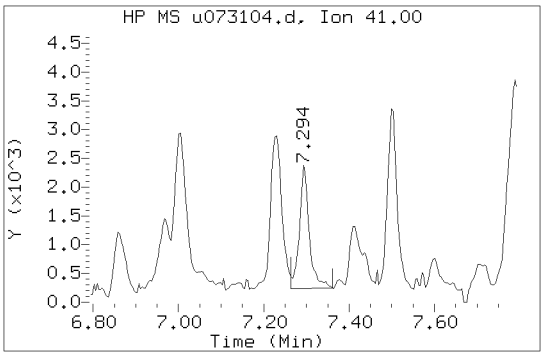
BEFORE

MASS
41
AREA
3534
HEIGHT
2144
01-Aug-2023
21:03



AFTER

MASS
41
AREA
3534
HEIGHT
2144
01-Aug-2023
21:03

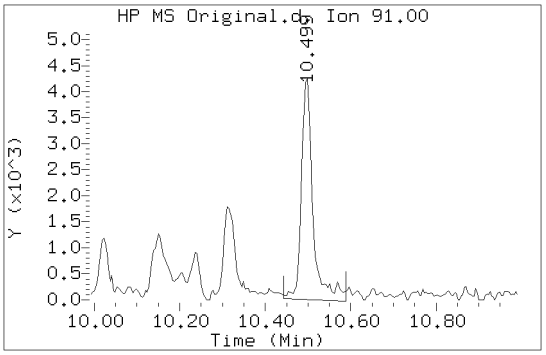


n-Butylbenzene (104-51-8)

Reason Code:

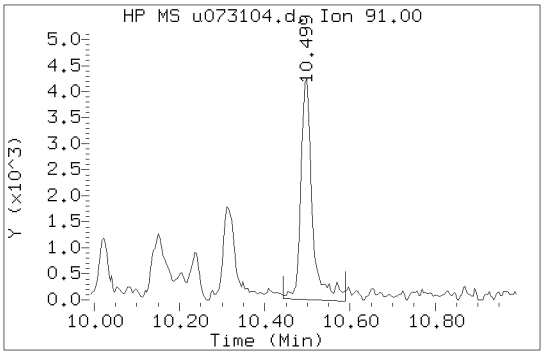
BEFORE

MASS
91
AREA
8159
HEIGHT
4243
01-Aug-2023
21:03



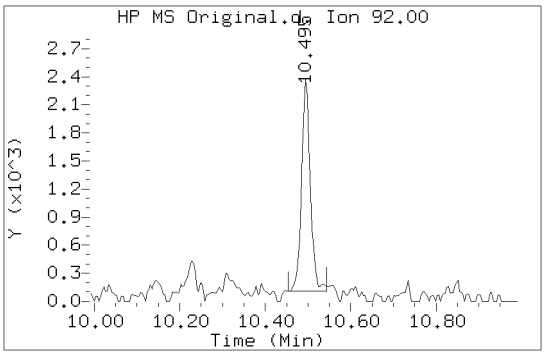
AFTER

MASS
91
AREA
8159
HEIGHT
4243
01-Aug-2023
21:03



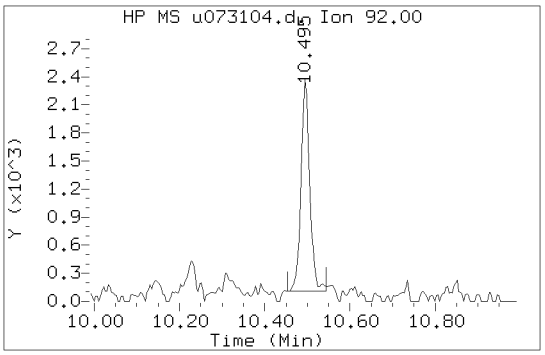
BEFORE

MASS
92
AREA
3235
HEIGHT
2256
01-Aug-2023
21:03



AFTER

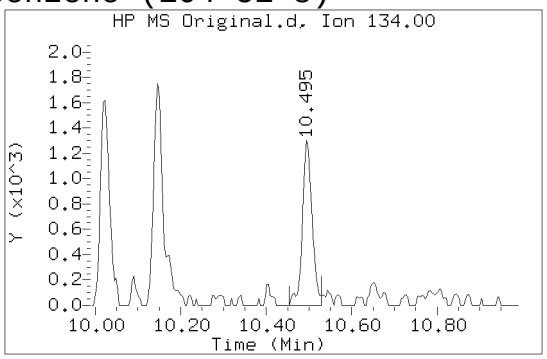
MASS
92
AREA
3235
HEIGHT
2256
01-Aug-2023
21:03



Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

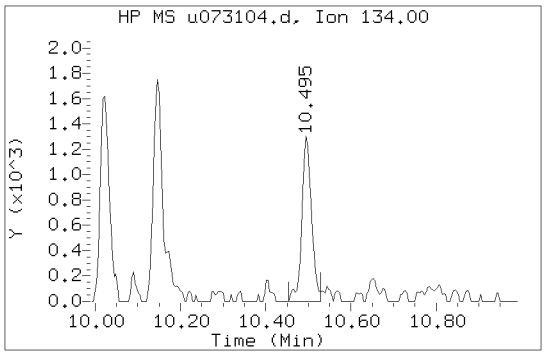
n-Butylbenzene (104-51-8)

BEFORE
MASS
134
AREA
2081
HEIGHT
1306
01-Aug-2023
21:03



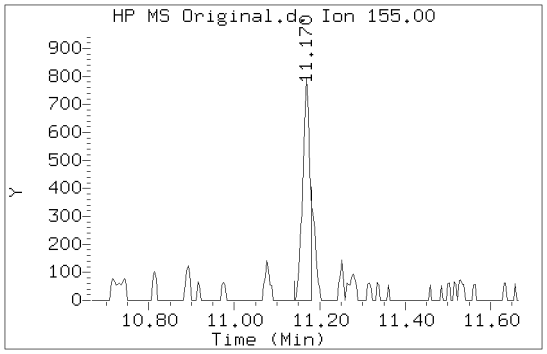
Reason Code:

AFTER
MASS
134
AREA
2081
HEIGHT
1306
01-Aug-2023
21:03



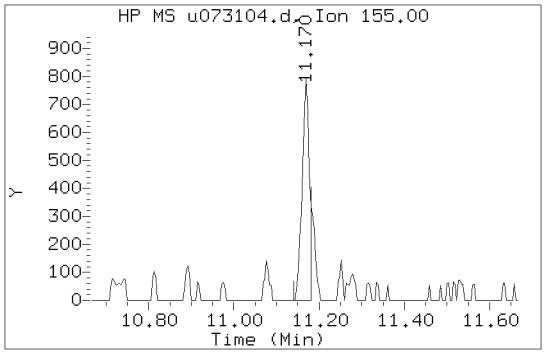
1,2-Dibromo-3-Chloropropane (96-12-8)

BEFORE
MASS
155
AREA
937
HEIGHT
792
01-Aug-2023
21:03

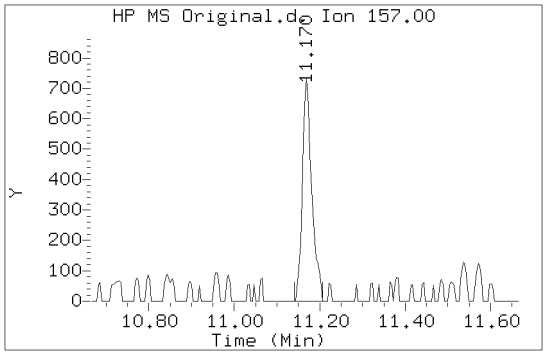


Reason Code:

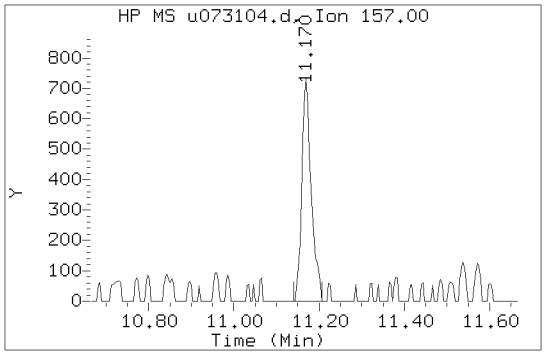
AFTER
MASS
155
AREA
937
HEIGHT
792
01-Aug-2023
21:03



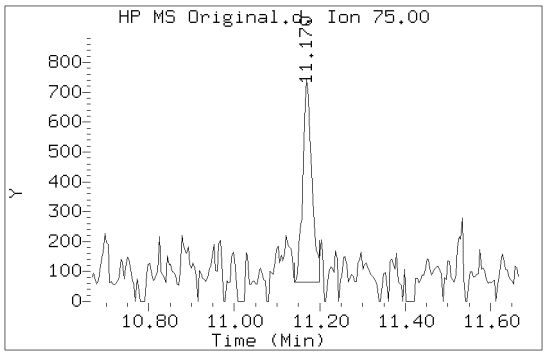
BEFORE
MASS
157
AREA
1135
HEIGHT
731
01-Aug-2023
21:03



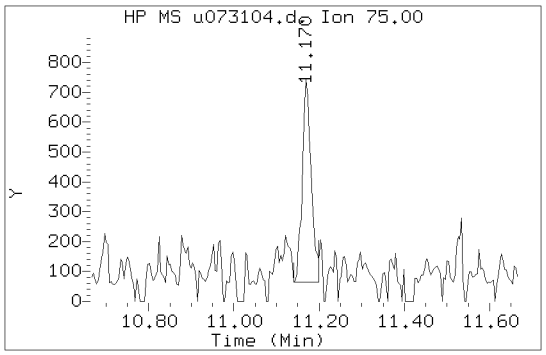
AFTER
MASS
157
AREA
1135
HEIGHT
731
01-Aug-2023
21:03



BEFORE
MASS
75
AREA
1000
HEIGHT
678
01-Aug-2023
21:03



AFTER
MASS
75
AREA
1000
HEIGHT
678
01-Aug-2023
21:03

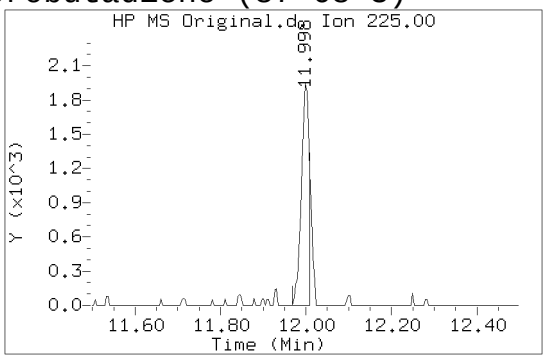


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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

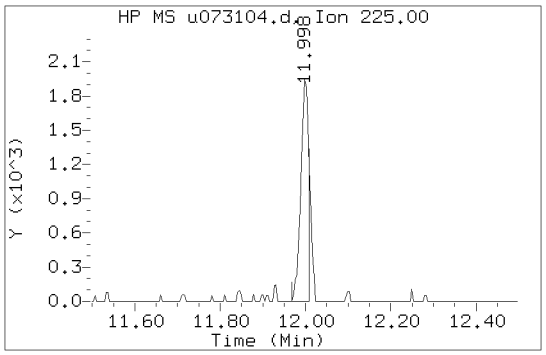
Hexachlorobutadiene (87-68-3)

Reason Code:

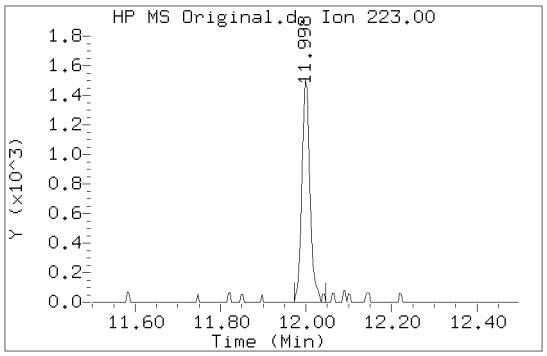
BEFORE
MASS
225
AREA
2531
HEIGHT
1943
01-Aug-2023
21:03



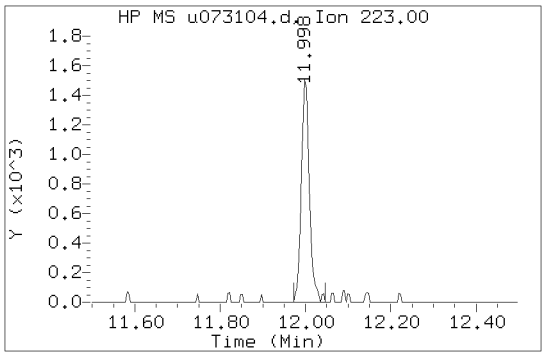
AFTER
MASS
225
AREA
2531
HEIGHT
1943
01-Aug-2023
21:03



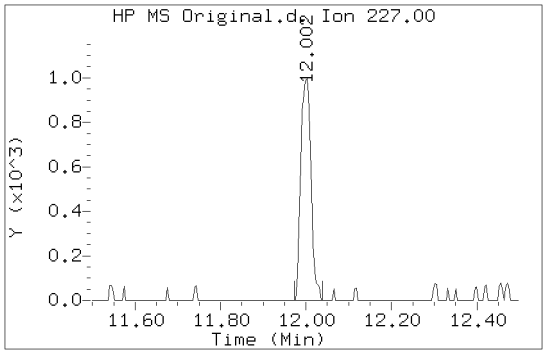
BEFORE
MASS
223
AREA
2053
HEIGHT
1504
01-Aug-2023
21:03



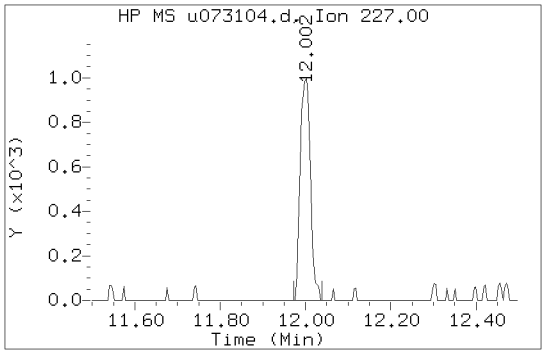
AFTER
MASS
223
AREA
2053
HEIGHT
1504
01-Aug-2023
21:03



BEFORE
MASS
227
AREA
1706
HEIGHT
996
01-Aug-2023
21:03



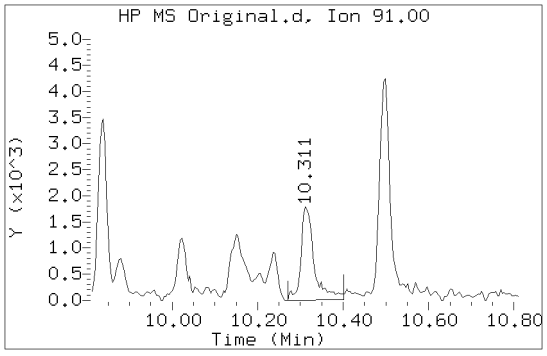
AFTER
MASS
227
AREA
1706
HEIGHT
996
01-Aug-2023
21:03



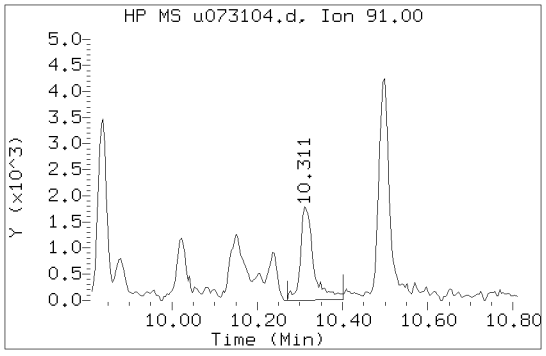
Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
3936
HEIGHT
1789
01-Aug-2023
21:03



AFTER
MASS
91
AREA
3936
HEIGHT
1789
01-Aug-2023
21:03

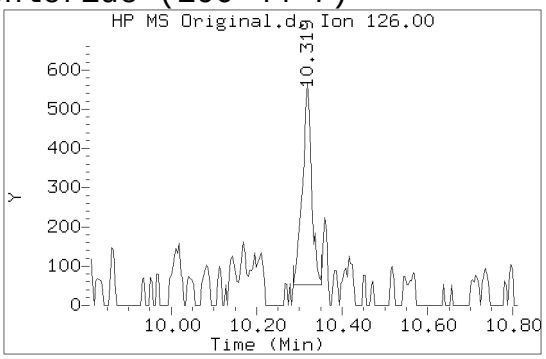


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

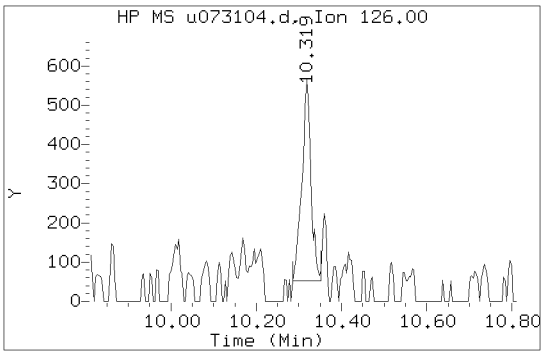
Benzyl Chloride (100-44-7)

Reason Code:

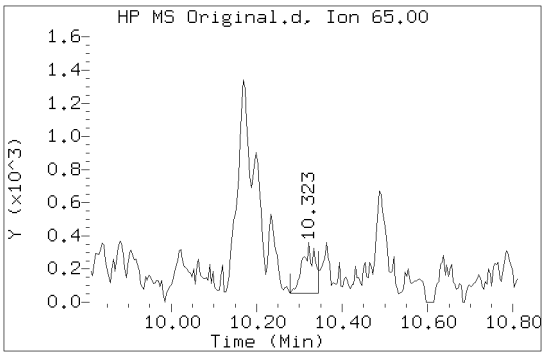
BEFORE
MASS
126
AREA
770
HEIGHT
513
01-Aug-2023
21:03



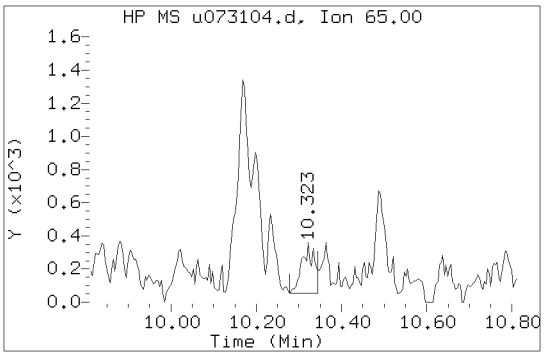
AFTER
MASS
126
AREA
770
HEIGHT
513
01-Aug-2023
21:03



BEFORE
MASS
65
AREA
603
HEIGHT
305
01-Aug-2023
21:03



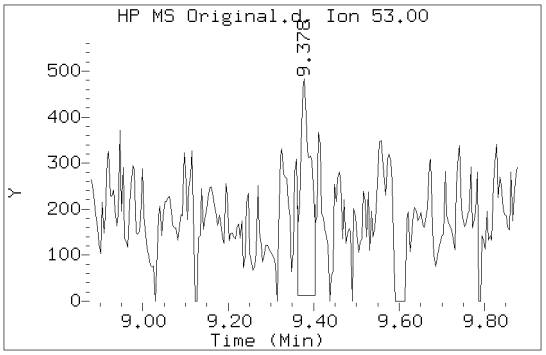
AFTER
MASS
65
AREA
603
HEIGHT
305
01-Aug-2023
21:03



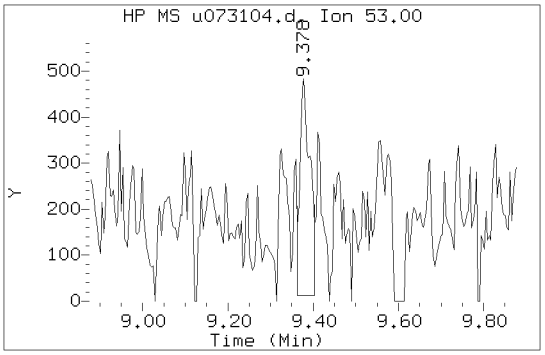
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

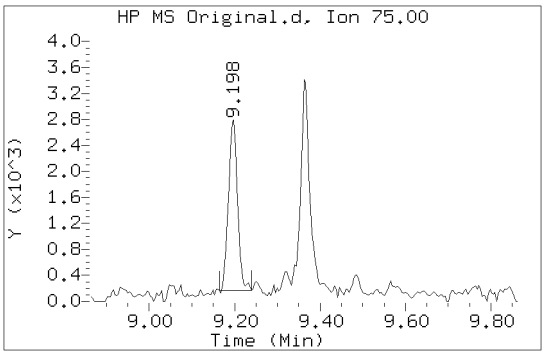
BEFORE
MASS
53
AREA
801
HEIGHT
471
01-Aug-2023
21:03



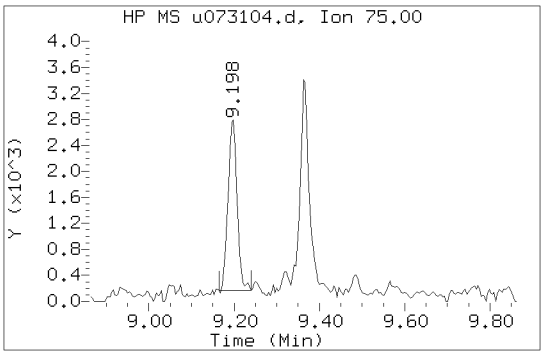
AFTER
MASS
53
AREA
801
HEIGHT
471
01-Aug-2023
21:03



BEFORE
MASS
75
AREA
3893
HEIGHT
2625
01-Aug-2023
21:03



AFTER
MASS
75
AREA
3893
HEIGHT
2625
01-Aug-2023
21:03

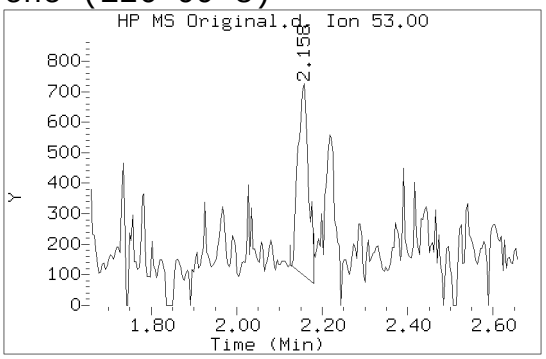


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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

Chloroprene (126-99-8)

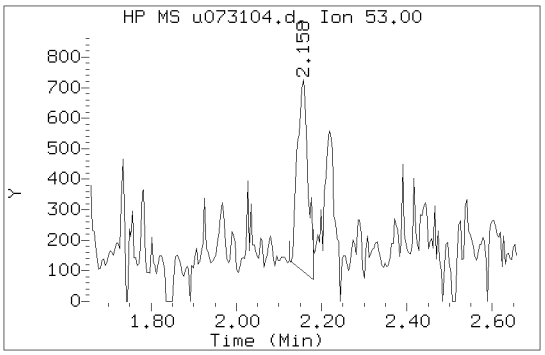
BEFORE

MASS
53
AREA
1093
HEIGHT
628
01-Aug-2023
21:03



AFTER

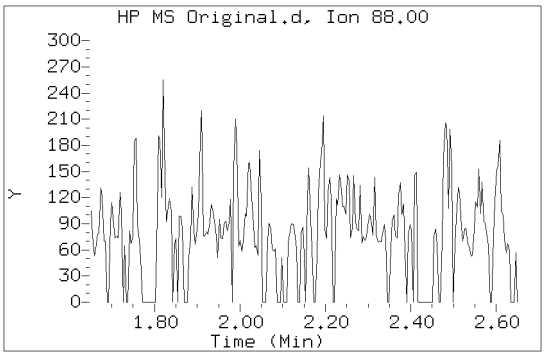
MASS
53
AREA
1093
HEIGHT
628
01-Aug-2023
21:03



Reason Code:

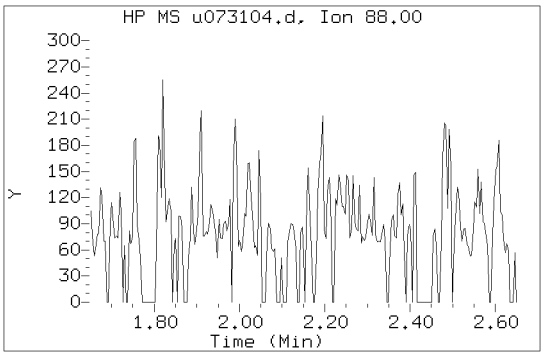
BEFORE

MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03

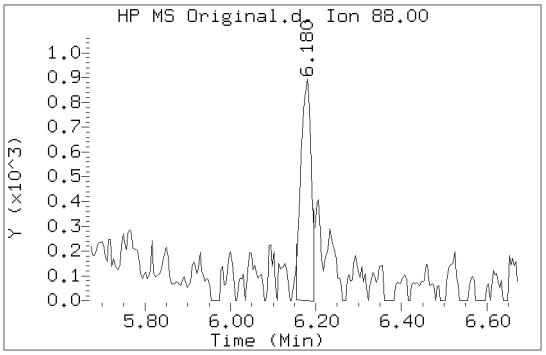


Reason Code:

1,4-Dioxane ()

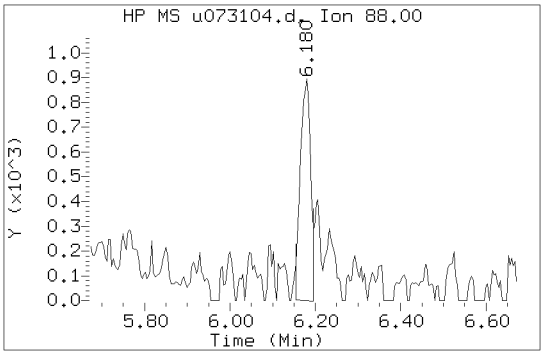
BEFORE

MASS
88
AREA
1547
HEIGHT
895
01-Aug-2023
21:03



AFTER

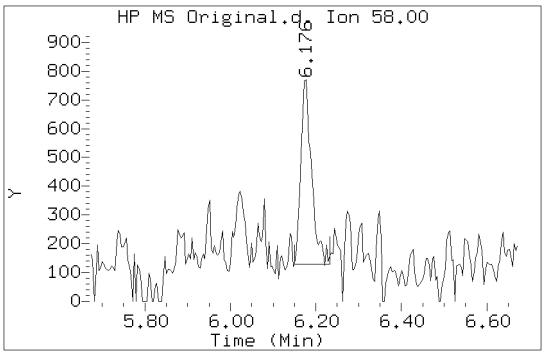
MASS
88
AREA
1547
HEIGHT
895
01-Aug-2023
21:03



Reason Code:

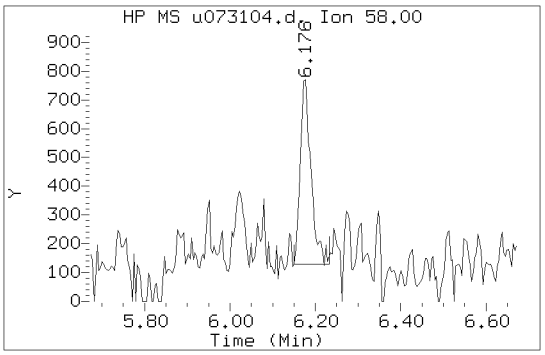
BEFORE

MASS
58
AREA
1142
HEIGHT
640
01-Aug-2023
21:03



AFTER

MASS
58
AREA
1142
HEIGHT
640
01-Aug-2023
21:03



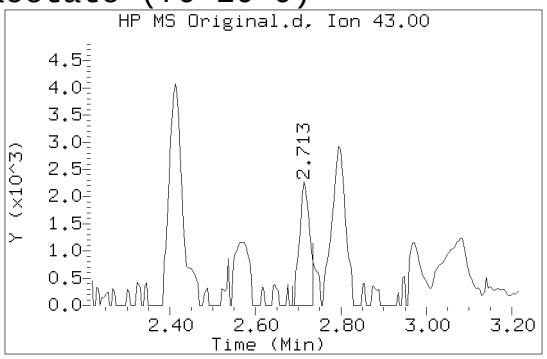
Reason Code:

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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

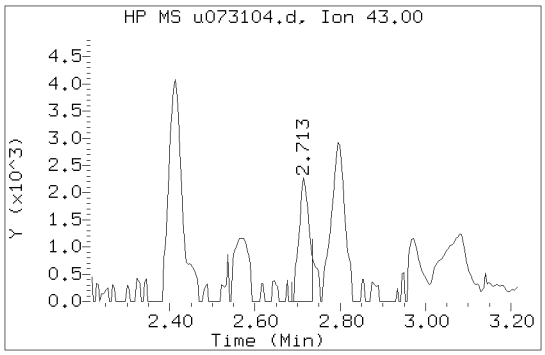
Methyl acetate (79-20-9)

Reason Code:

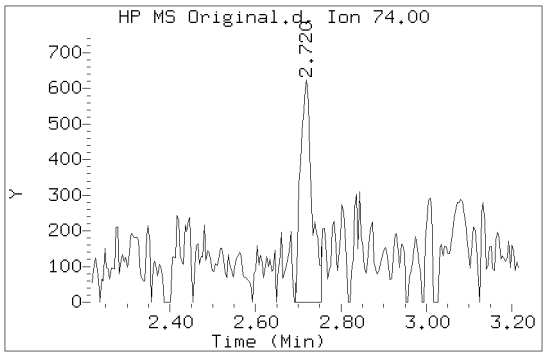
BEFORE
MASS
43
AREA
3863
HEIGHT
2276
01-Aug-2023
21:03



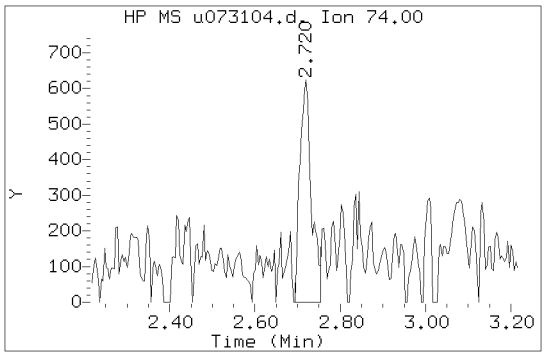
AFTER
MASS
43
AREA
3863
HEIGHT
2276
01-Aug-2023
21:03



BEFORE
MASS
74
AREA
1206
HEIGHT
624
01-Aug-2023
21:03



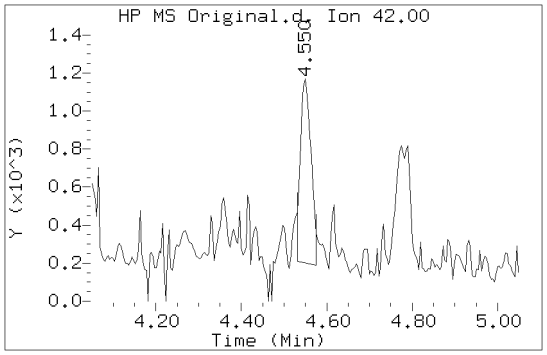
AFTER
MASS
74
AREA
1206
HEIGHT
624
01-Aug-2023
21:03



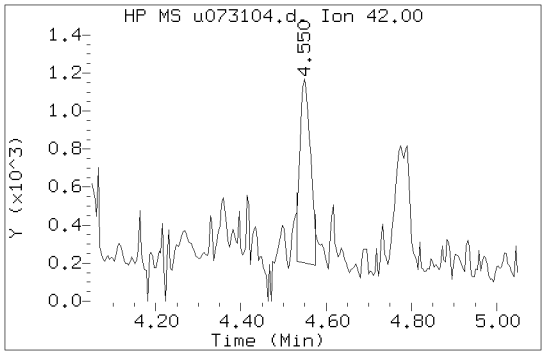
Tetrahydrofuran (109-99-9)

Reason Code:

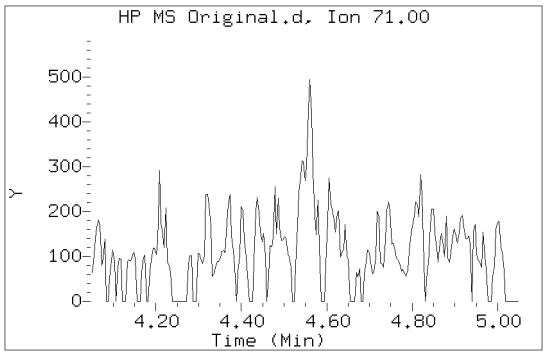
BEFORE
MASS
42
AREA
1750
HEIGHT
968
01-Aug-2023
21:03



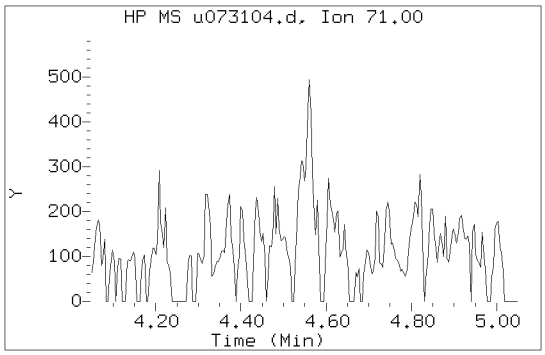
AFTER
MASS
42
AREA
1750
HEIGHT
968
01-Aug-2023
21:03



BEFORE
MASS
71
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
71
AREA
0
HEIGHT
0
01-Aug-2023
21:03

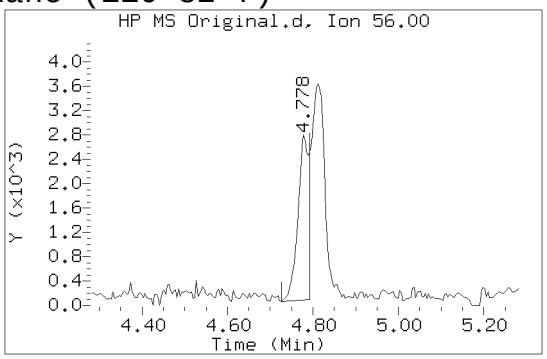


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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

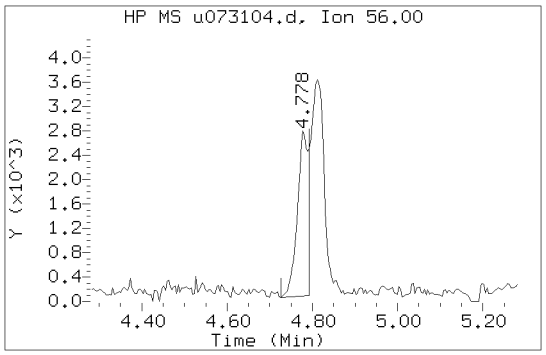
Cyclohexane (110-82-7)

Reason Code:

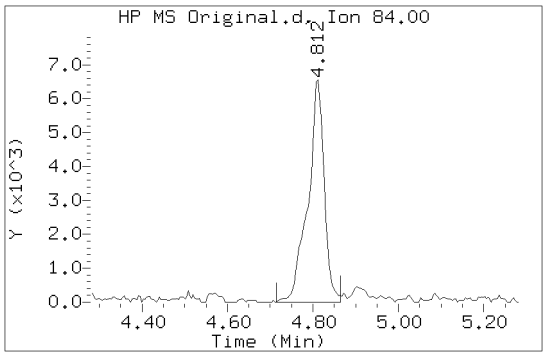
BEFORE
MASS
56
AREA
5131
HEIGHT
2714
01-Aug-2023
21:03



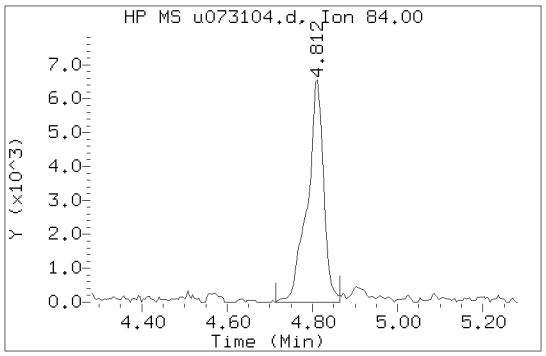
AFTER
MASS
56
AREA
5131
HEIGHT
2714
01-Aug-2023
21:03



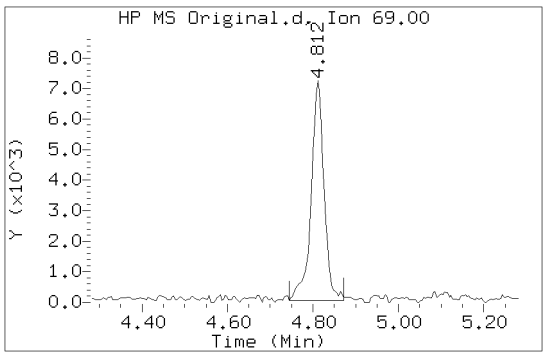
BEFORE
MASS
84
AREA
17428
HEIGHT
6555
01-Aug-2023
21:03



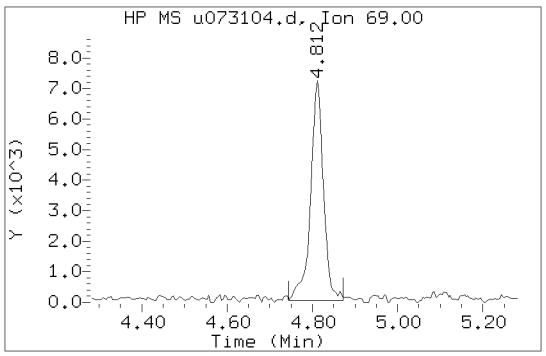
AFTER
MASS
84
AREA
17428
HEIGHT
6555
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
15053
HEIGHT
7181
01-Aug-2023
21:03



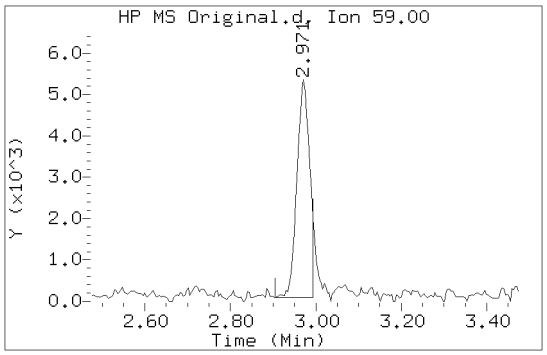
AFTER
MASS
69
AREA
15053
HEIGHT
7181
01-Aug-2023
21:03



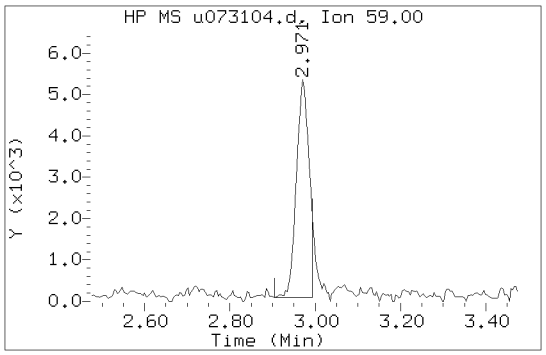
Tert-butyl alcohol (75-65-0)

Reason Code:

BEFORE
MASS
59
AREA
11049
HEIGHT
5265
01-Aug-2023
21:03



AFTER
MASS
59
AREA
11049
HEIGHT
5265
01-Aug-2023
21:03



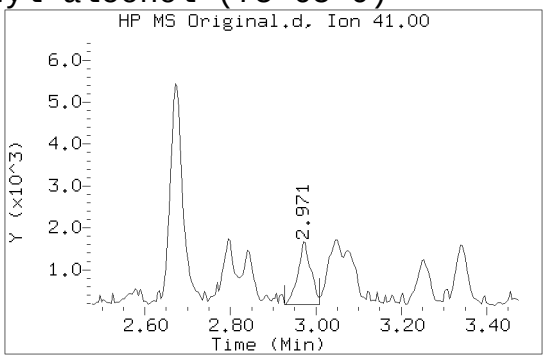
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

Tert-butyl alcohol (75-65-0)

Reason Code:

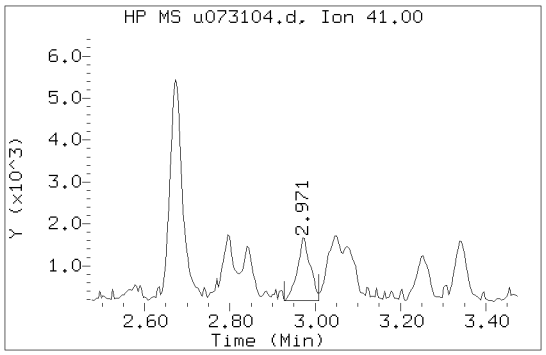
BEFORE

MASS
41
AREA
3230
HEIGHT
1503
01-Aug-2023
21:03



AFTER

MASS
41
AREA
3230
HEIGHT
1503
01-Aug-2023
21:03

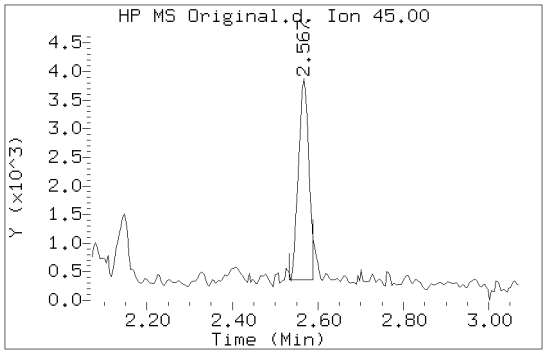


Isopropyl alcohol (67-63-0)

Reason Code:

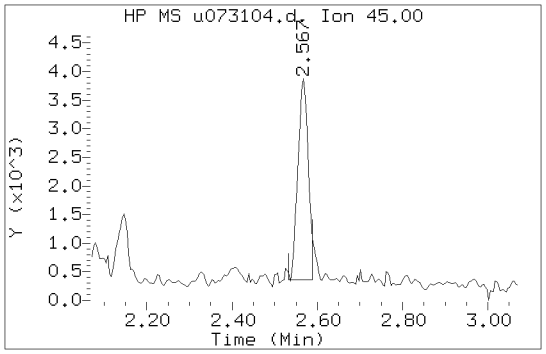
BEFORE

MASS
45
AREA
6059
HEIGHT
3513
01-Aug-2023
21:03



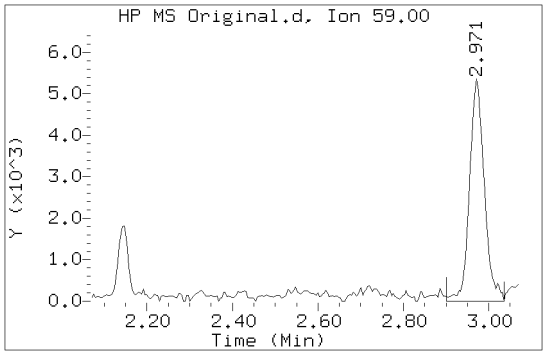
AFTER

MASS
45
AREA
6059
HEIGHT
3513
01-Aug-2023
21:03



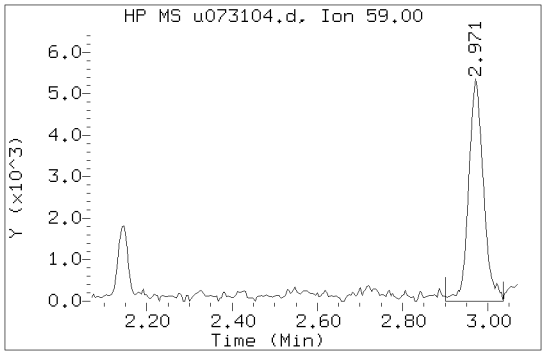
BEFORE

MASS
59
AREA
12887
HEIGHT
5360
01-Aug-2023
21:03



AFTER

MASS
59
AREA
12887
HEIGHT
5360
01-Aug-2023
21:03

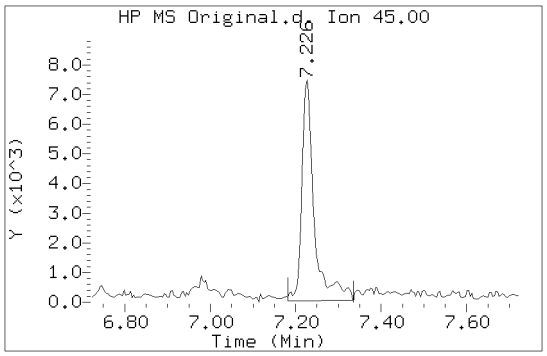


4-Methyl-2-pentanol (108-11-2)

Reason Code:

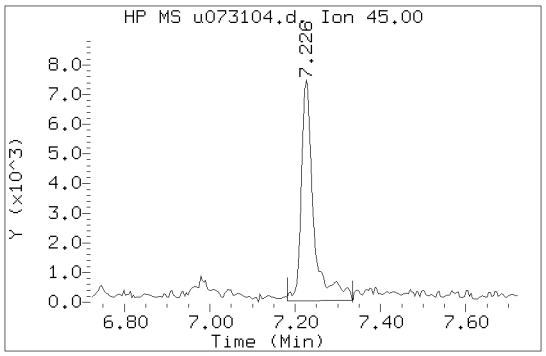
BEFORE

MASS
45
AREA
15329
HEIGHT
7450
01-Aug-2023
21:03



AFTER

MASS
45
AREA
15329
HEIGHT
7450
01-Aug-2023
21:03



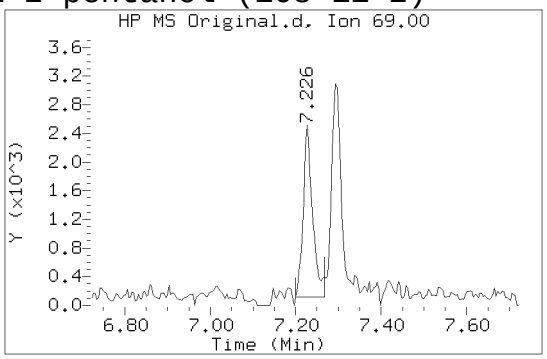
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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

4-Methyl-2-pentanol (108-11-2)

Reason Code:

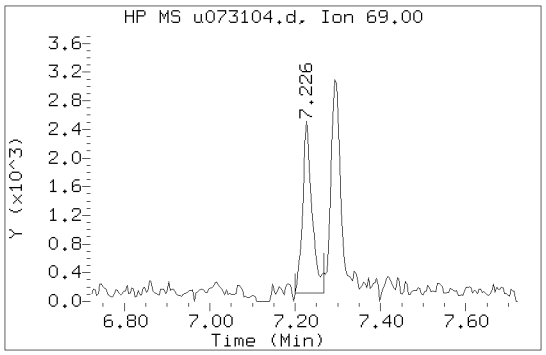
BEFORE

MASS
69
AREA
3745
HEIGHT
2396
01-Aug-2023
21:03



AFTER

MASS
69
AREA
3745
HEIGHT
2396
01-Aug-2023
21:03

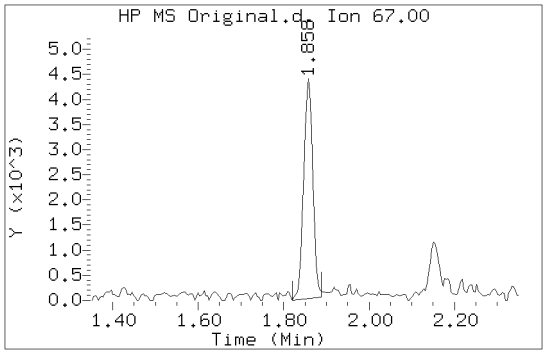


Dichlorofluoromethane (75-43-4)

Reason Code:

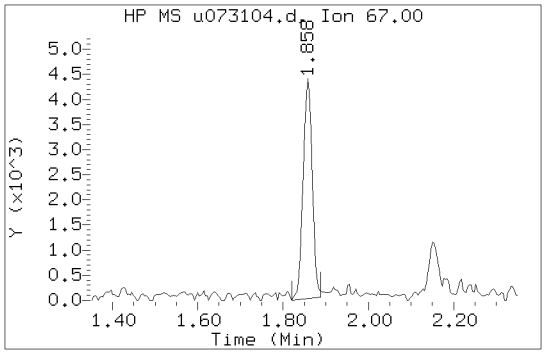
BEFORE

MASS
67
AREA
6714
HEIGHT
4377
01-Aug-2023
21:03



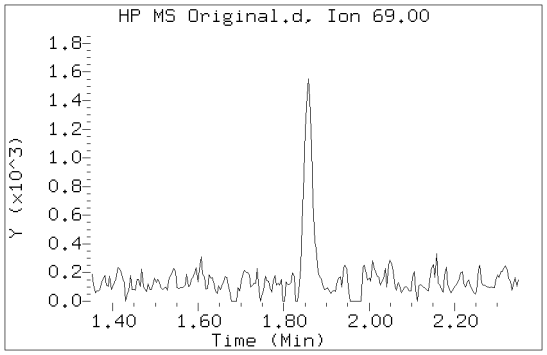
AFTER

MASS
67
AREA
6714
HEIGHT
4377
01-Aug-2023
21:03



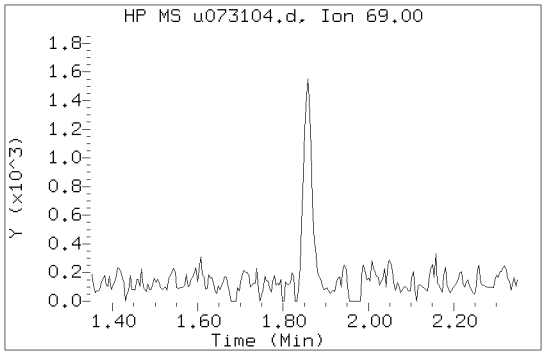
BEFORE

MASS
69
AREA
0
HEIGHT
0
01-Aug-2023
21:03



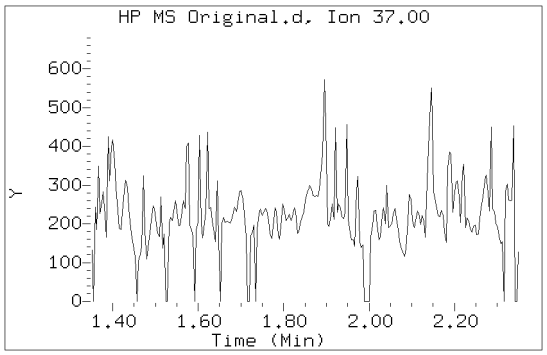
AFTER

MASS
69
AREA
0
HEIGHT
0
01-Aug-2023
21:03



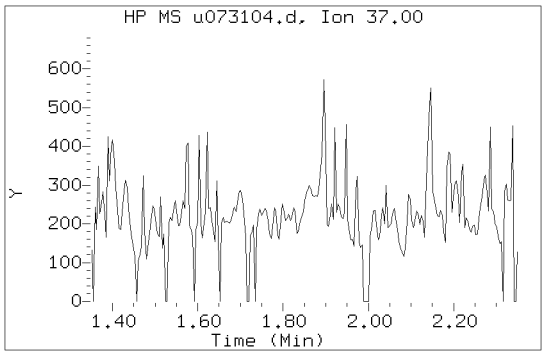
BEFORE

MASS
37
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
37
AREA
0
HEIGHT
0
01-Aug-2023
21:03

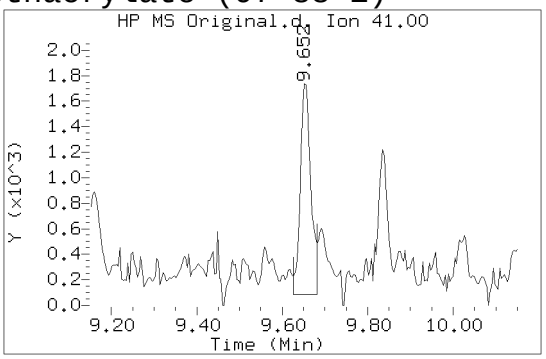


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InstruID : VOA9.i
LabSampID : VSTD001

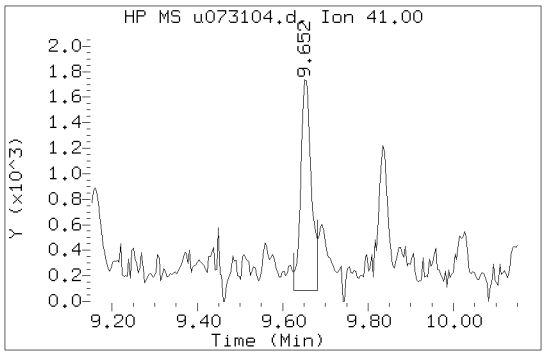
Butyl methacrylate (97-88-1)

Reason Code:

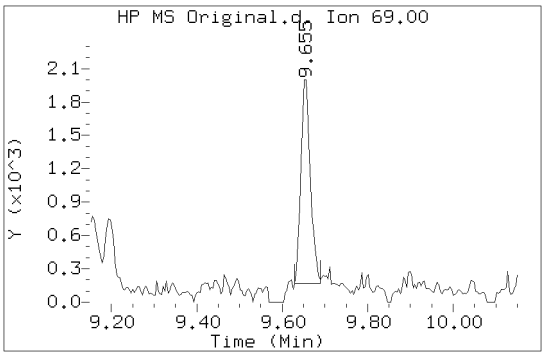
BEFORE
MASS
41
AREA
2947
HEIGHT
1653
01-Aug-2023
21:03



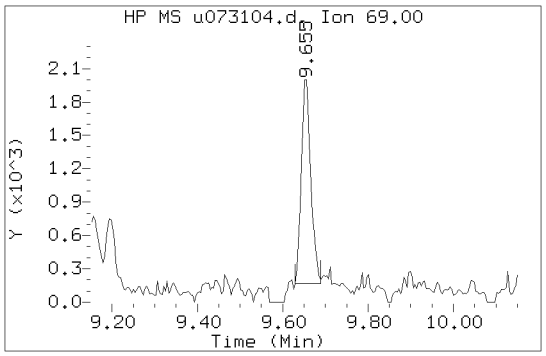
AFTER
MASS
41
AREA
2947
HEIGHT
1653
01-Aug-2023
21:03



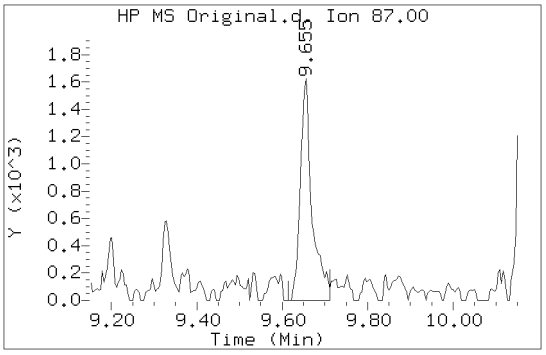
BEFORE
MASS
69
AREA
2894
HEIGHT
1829
01-Aug-2023
21:03



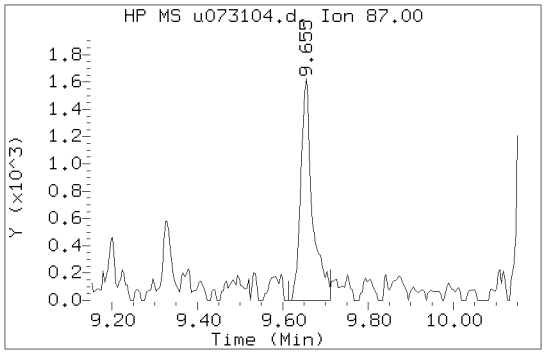
AFTER
MASS
69
AREA
2894
HEIGHT
1829
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
3159
HEIGHT
1624
01-Aug-2023
21:03



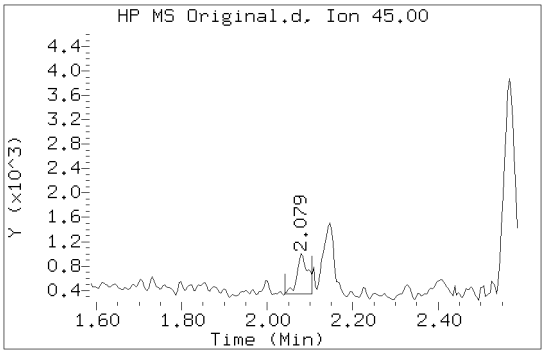
AFTER
MASS
87
AREA
3159
HEIGHT
1624
01-Aug-2023
21:03



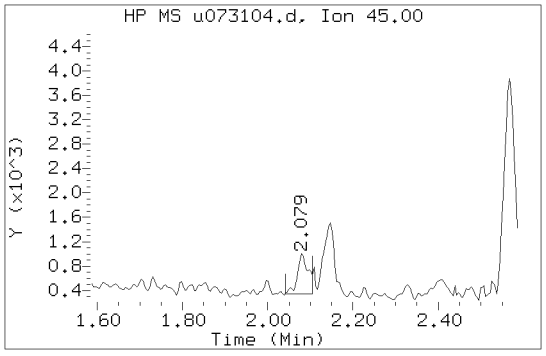
Ethanol (64-17-5)

Reason Code:

BEFORE
MASS
45
AREA
1210
HEIGHT
667
01-Aug-2023
21:03



AFTER
MASS
45
AREA
1210
HEIGHT
667
01-Aug-2023
21:03

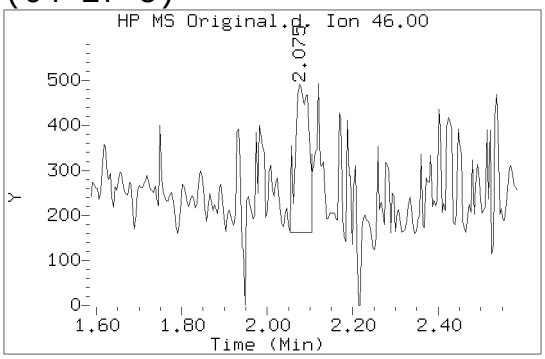


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

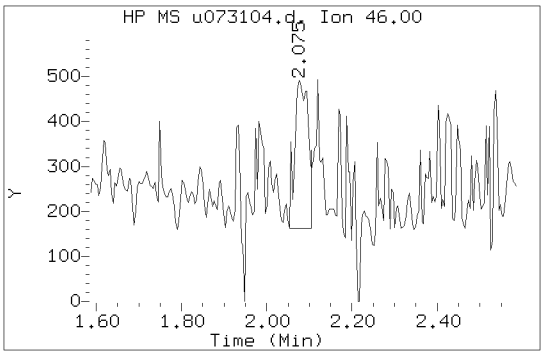
Ethanol (64-17-5)

Reason Code:

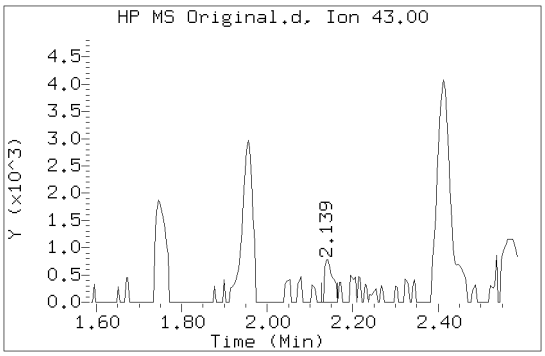
BEFORE
MASS
46
AREA
740
HEIGHT
329
01-Aug-2023
21:03



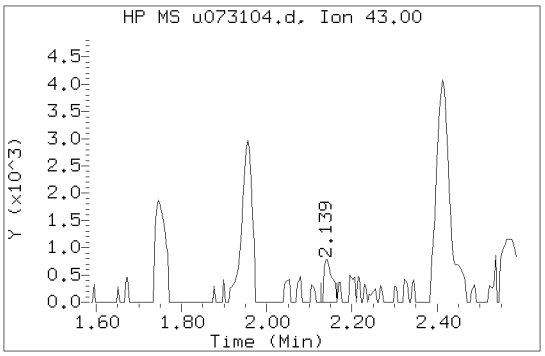
AFTER
MASS
46
AREA
740
HEIGHT
329
01-Aug-2023
21:03



BEFORE
MASS
43
AREA
1006
HEIGHT
778
01-Aug-2023
21:03



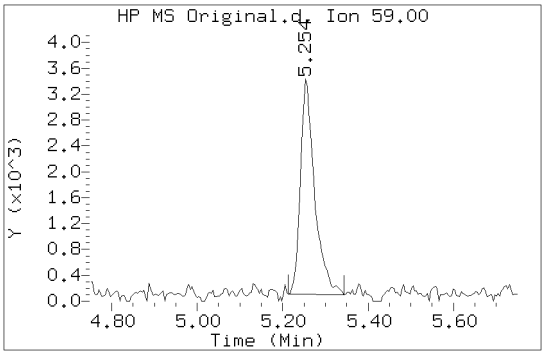
AFTER
MASS
43
AREA
1006
HEIGHT
778
01-Aug-2023
21:03



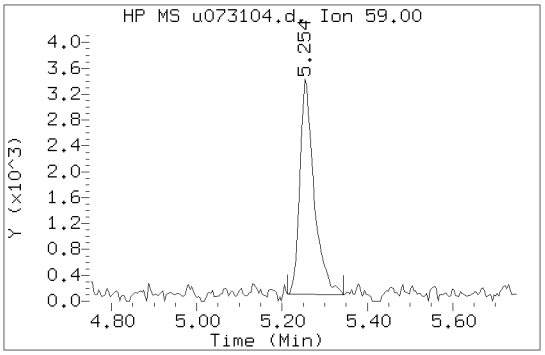
tert-Butyl formate (762-75-4)

Reason Code:

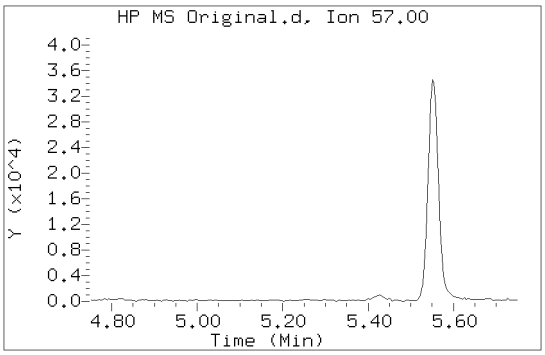
BEFORE
MASS
59
AREA
7783
HEIGHT
3329
01-Aug-2023
21:03



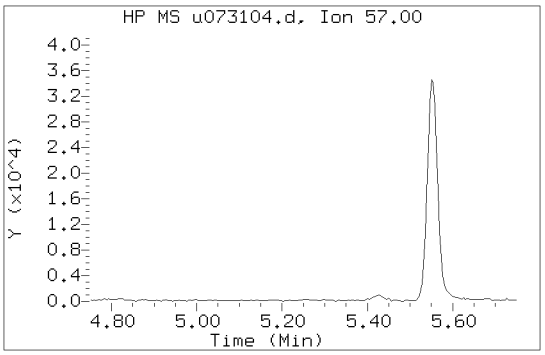
AFTER
MASS
59
AREA
7783
HEIGHT
3329
01-Aug-2023
21:03



BEFORE
MASS
57
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
57
AREA
0
HEIGHT
0
01-Aug-2023
21:03



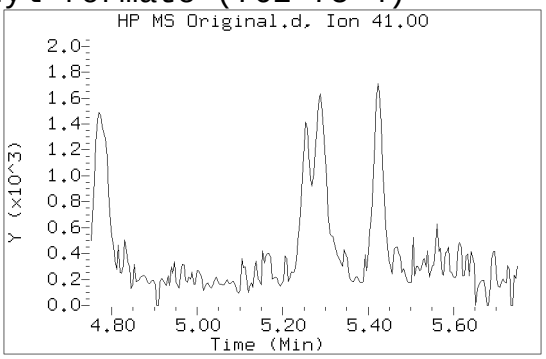
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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

tert-Butyl formate (762-75-4)

Reason Code:

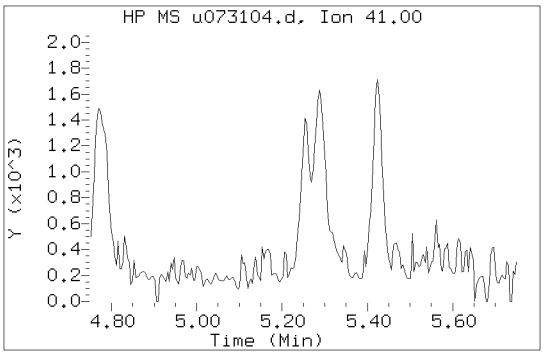
BEFORE

MASS
41
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
41
AREA
0
HEIGHT
0
01-Aug-2023
21:03

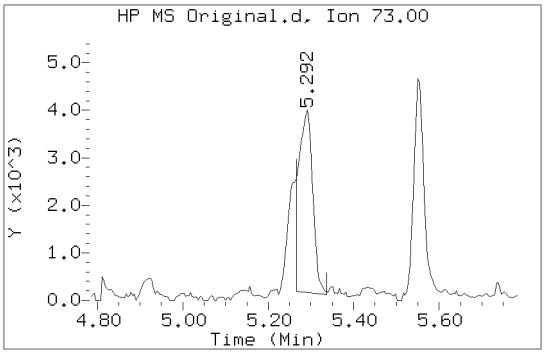


tert-Amyl methyl ether (974-05-08)

Reason Code:

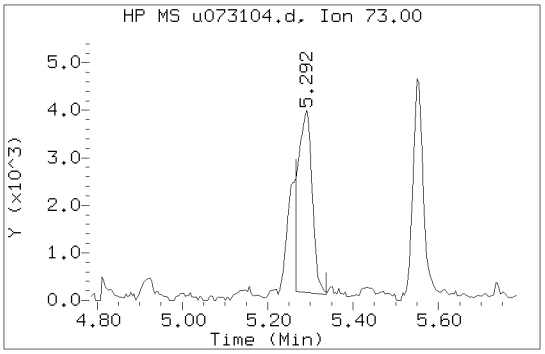
BEFORE

MASS
73
AREA
8905
HEIGHT
3846
01-Aug-2023
21:03



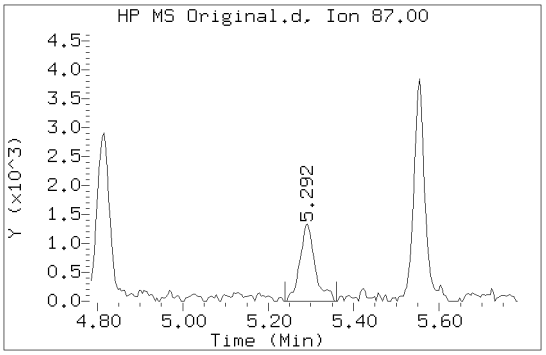
AFTER

MASS
73
AREA
8905
HEIGHT
3846
01-Aug-2023
21:03



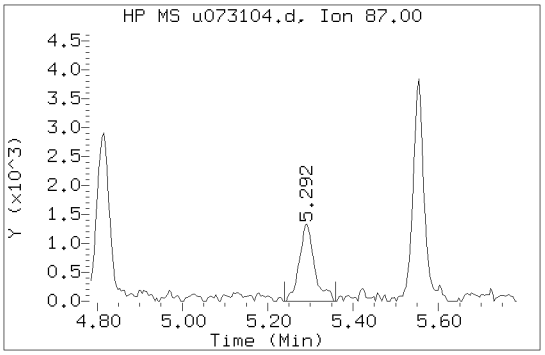
BEFORE

MASS
87
AREA
3350
HEIGHT
1337
01-Aug-2023
21:03



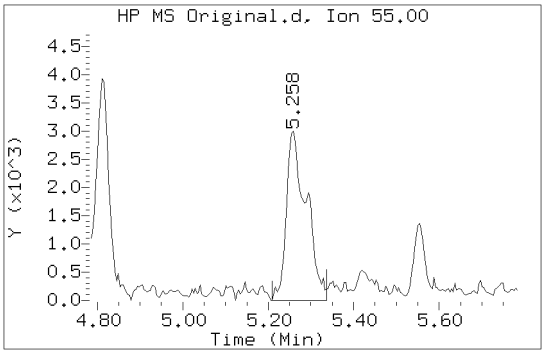
AFTER

MASS
87
AREA
3350
HEIGHT
1337
01-Aug-2023
21:03



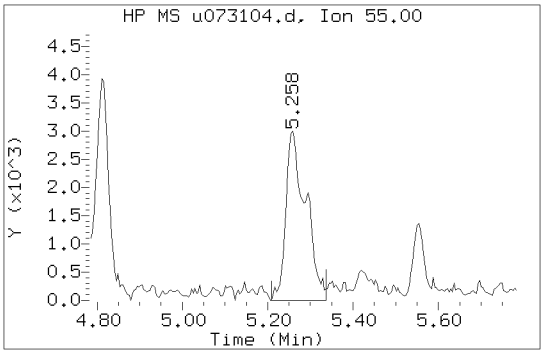
BEFORE

MASS
55
AREA
9835
HEIGHT
2995
01-Aug-2023
21:03



AFTER

MASS
55
AREA
9835
HEIGHT
2995
01-Aug-2023
21:03

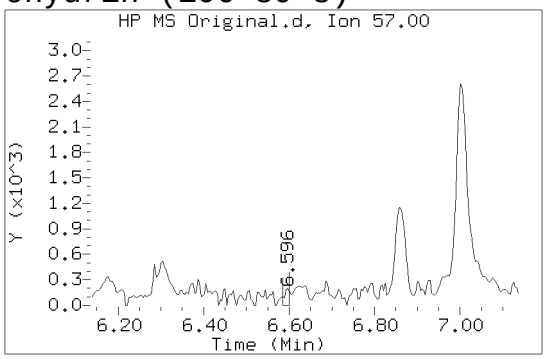


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InstruID : VOA9.i
LabSampID : VSTD001

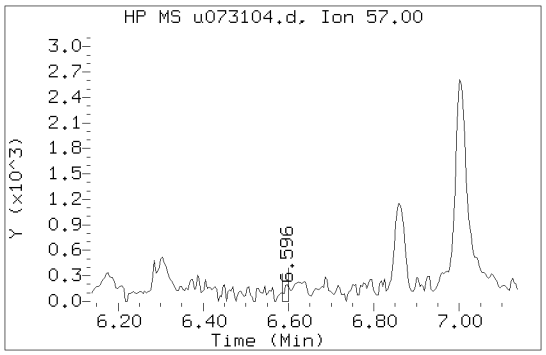
Epichlorohydrin (106-89-8)

Reason Code:

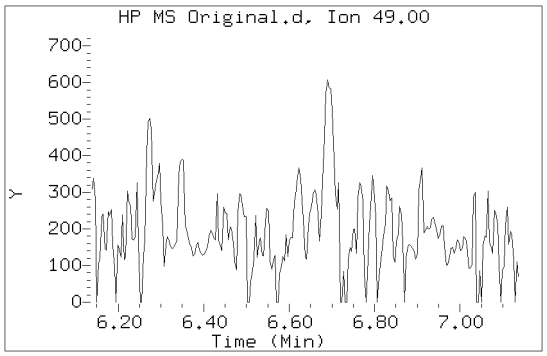
BEFORE
MASS
57
AREA
166
HEIGHT
196
01-Aug-2023
21:03



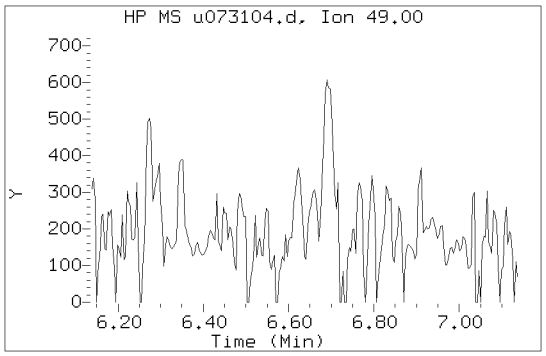
AFTER
MASS
57
AREA
166
HEIGHT
196
01-Aug-2023
21:03



BEFORE
MASS
49
AREA
0
HEIGHT
0
01-Aug-2023
21:03



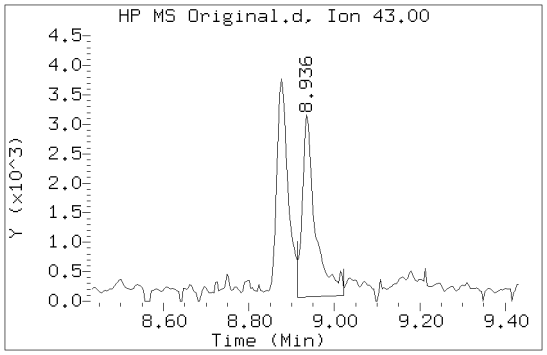
AFTER
MASS
49
AREA
0
HEIGHT
0
01-Aug-2023
21:03



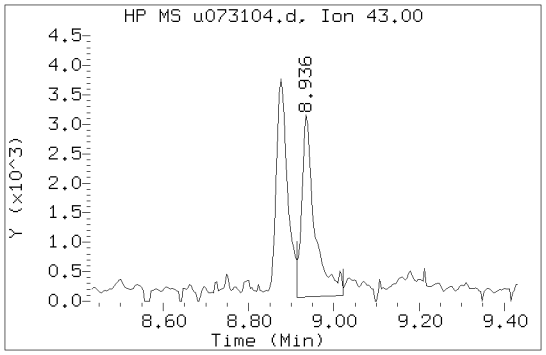
n-Amyl acetate (628-63-7)

Reason Code:

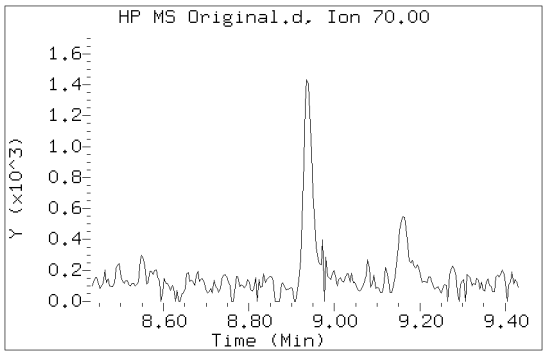
BEFORE
MASS
43
AREA
6745
HEIGHT
3088
01-Aug-2023
21:03



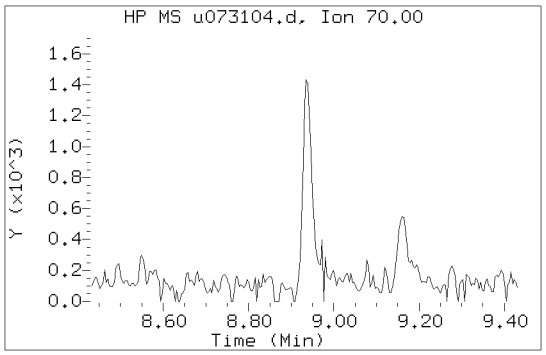
AFTER
MASS
43
AREA
6745
HEIGHT
3088
01-Aug-2023
21:03



BEFORE
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



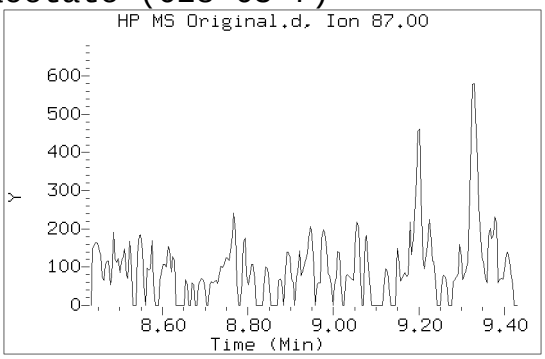
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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

n-Amyl acetate (628-63-7)

Reason Code:

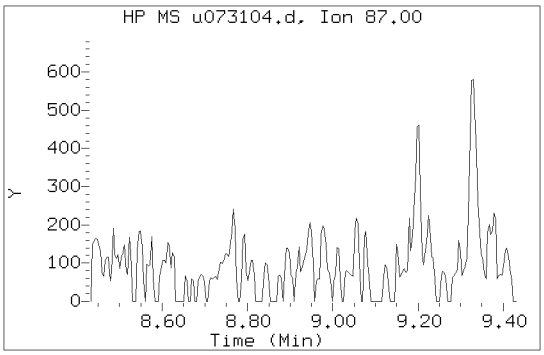
BEFORE

MASS
87
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
87
AREA
0
HEIGHT
0
01-Aug-2023
21:03

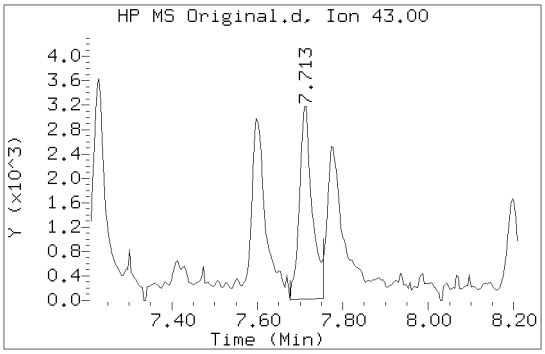


n-Butyl acetate (123-86-4)

Reason Code:

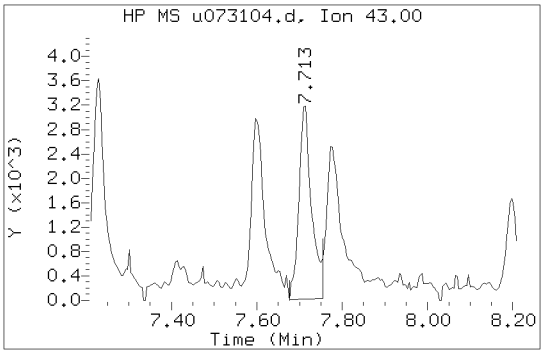
BEFORE

MASS
43
AREA
6708
HEIGHT
3156
01-Aug-2023
21:03



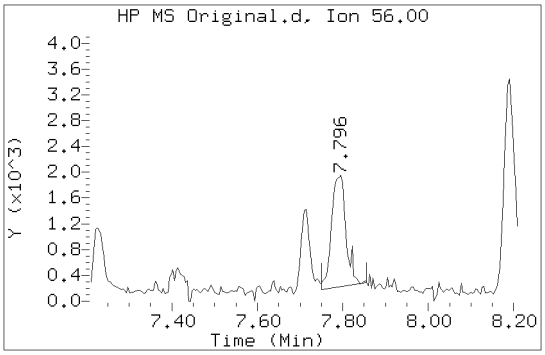
AFTER

MASS
43
AREA
6708
HEIGHT
3156
01-Aug-2023
21:03



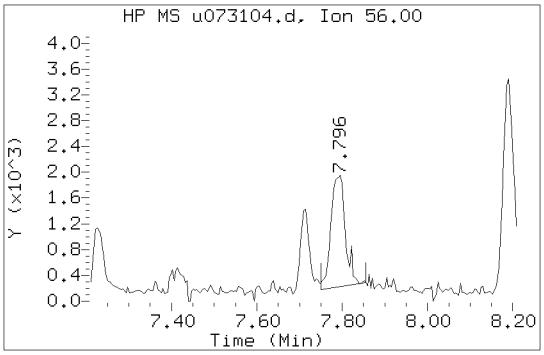
BEFORE

MASS
56
AREA
4039
HEIGHT
1726
01-Aug-2023
21:03



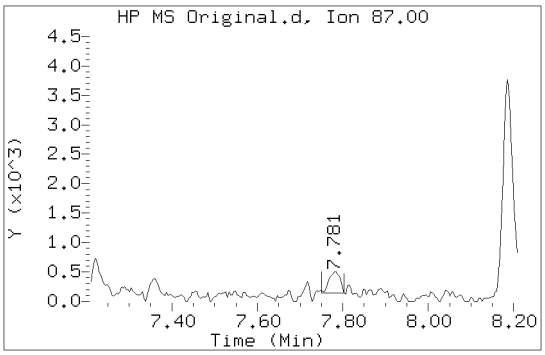
AFTER

MASS
56
AREA
4039
HEIGHT
1726
01-Aug-2023
21:03



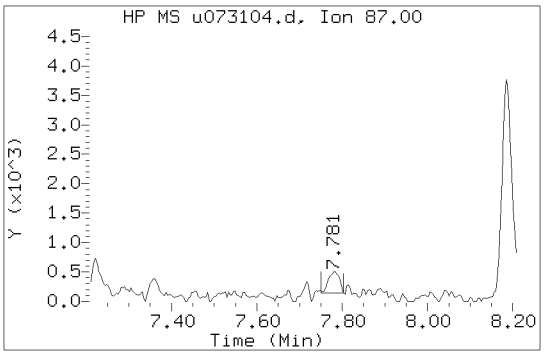
BEFORE

MASS
87
AREA
660
HEIGHT
367
01-Aug-2023
21:03



AFTER

MASS
87
AREA
660
HEIGHT
367
01-Aug-2023
21:03

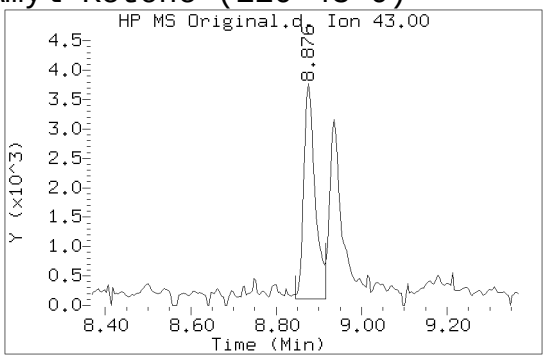


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LabSampID : VSTD001

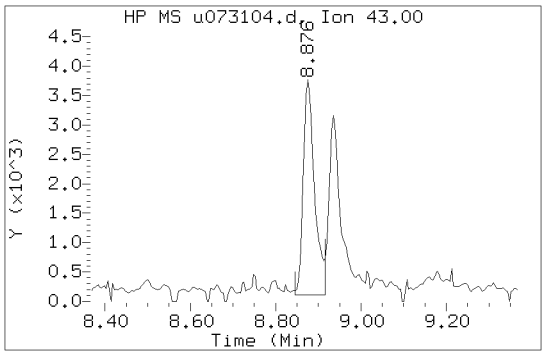
Methyl Amyl Ketone (110-43-0)

Reason Code:

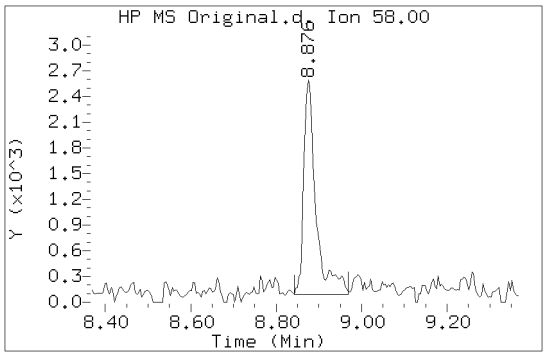
BEFORE
MASS
43
AREA
6882
HEIGHT
3661
01-Aug-2023
21:03



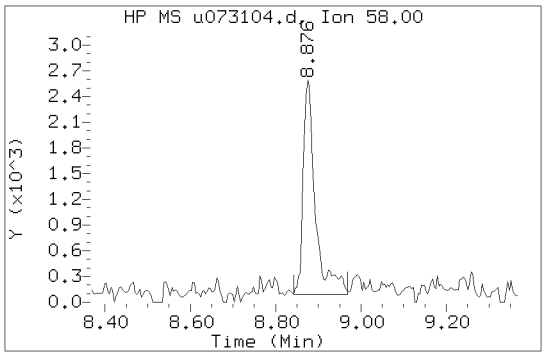
AFTER
MASS
43
AREA
6882
HEIGHT
3661
01-Aug-2023
21:03



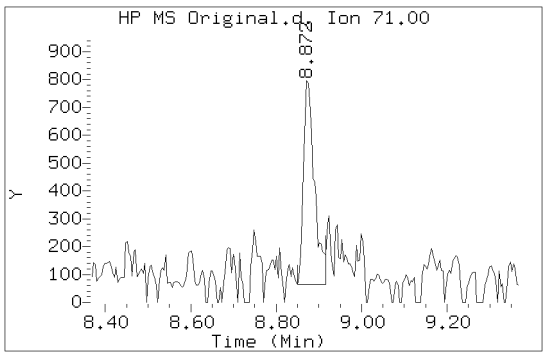
BEFORE
MASS
58
AREA
5031
HEIGHT
2504
01-Aug-2023
21:03



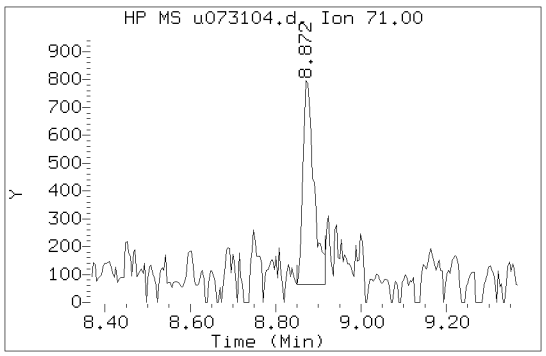
AFTER
MASS
58
AREA
5031
HEIGHT
2504
01-Aug-2023
21:03



BEFORE
MASS
71
AREA
1320
HEIGHT
732
01-Aug-2023
21:03



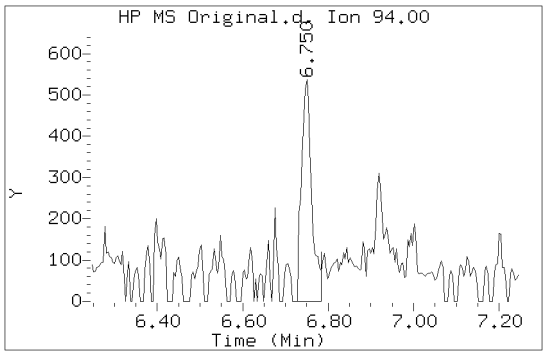
AFTER
MASS
71
AREA
1320
HEIGHT
732
01-Aug-2023
21:03



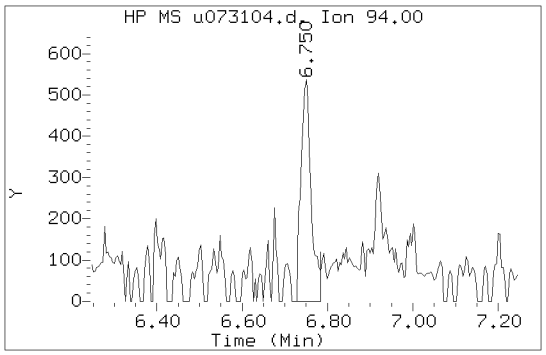
Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE
MASS
94
AREA
917
HEIGHT
537
01-Aug-2023
21:03



AFTER
MASS
94
AREA
917
HEIGHT
537
01-Aug-2023
21:03

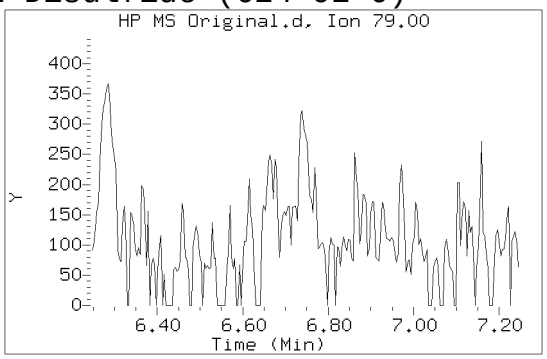


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073104.d
Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

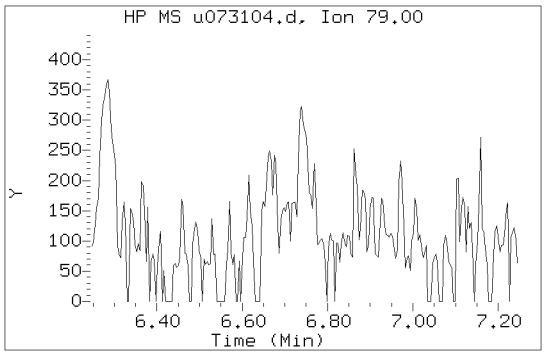
Dimethyl Disulfide (624-92-0)

Reason Code:

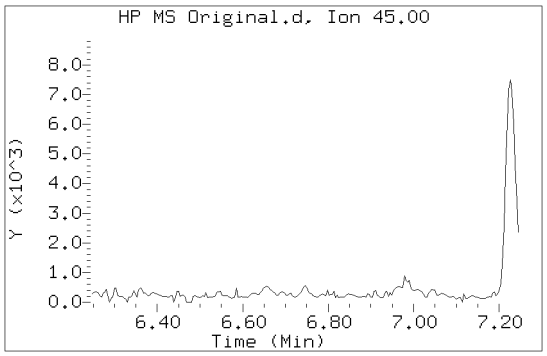
BEFORE
MASS
79
AREA
0
HEIGHT
0
01-Aug-2023
21:03



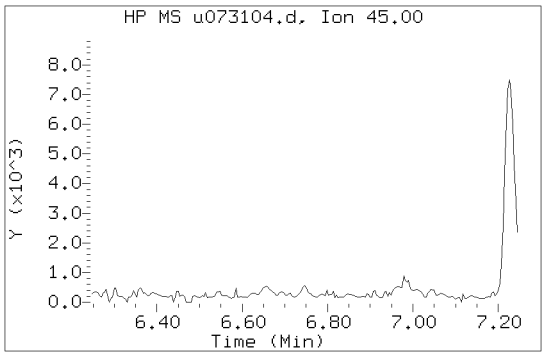
AFTER
MASS
79
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
45
AREA
0
HEIGHT
0
01-Aug-2023
21:03



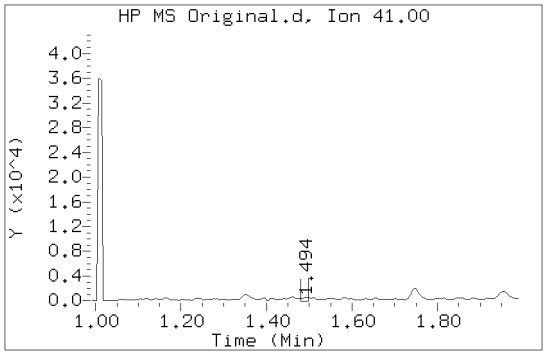
AFTER
MASS
45
AREA
0
HEIGHT
0
01-Aug-2023
21:03



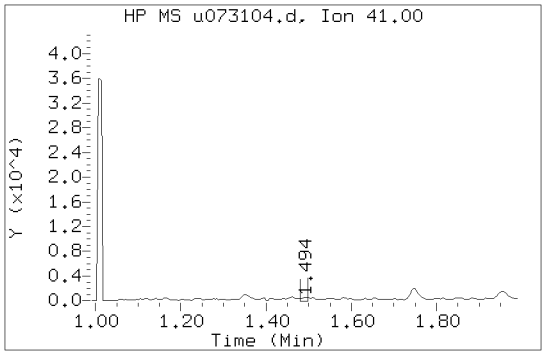
Isobutylene (115-11-7)

Reason Code:

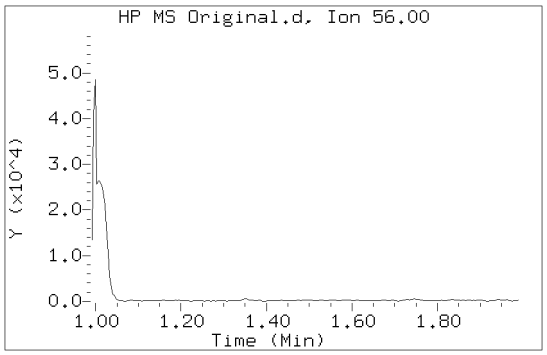
BEFORE
MASS
41
AREA
696
HEIGHT
630
01-Aug-2023
21:03



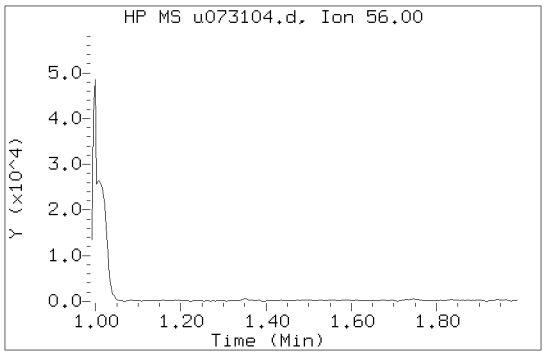
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21:03



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21:03



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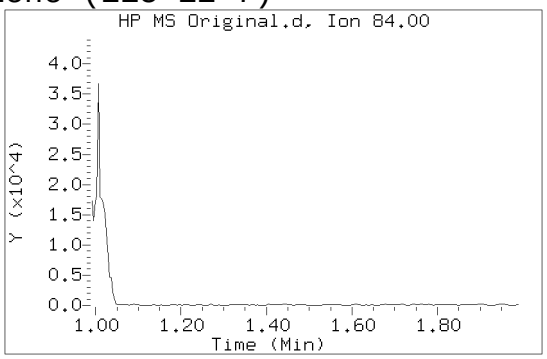
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Inj Date : 31-JUL-2023 12:37
InstruID : VOA9.i
LabSampID : VSTD001

Isobutylene (115-11-7)

Reason Code:

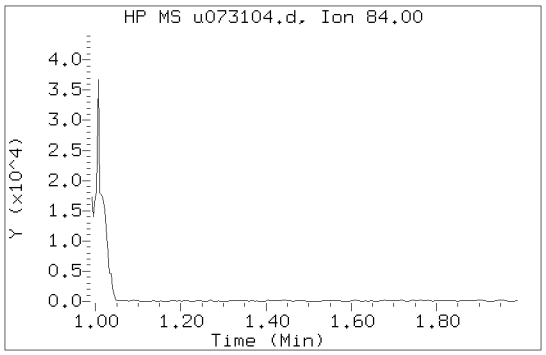
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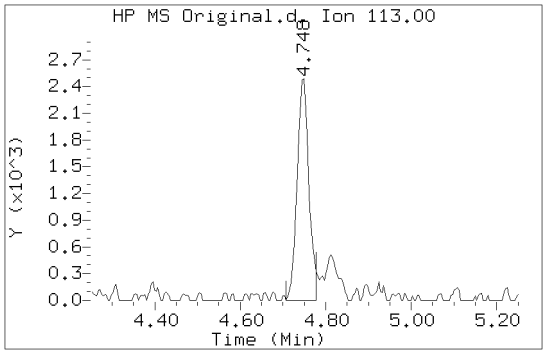


Dibromofluoromethane (1868-53-7)

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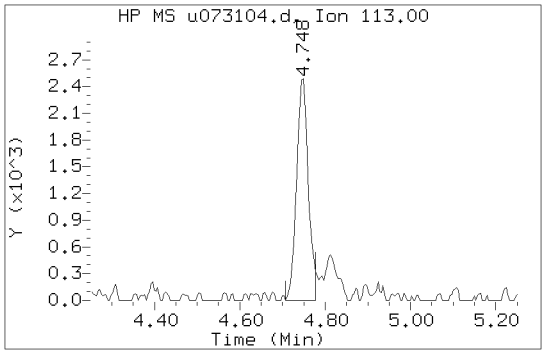
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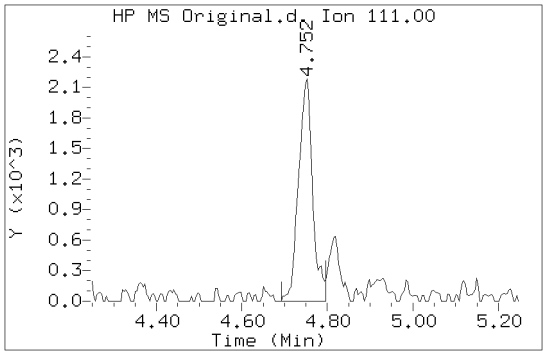
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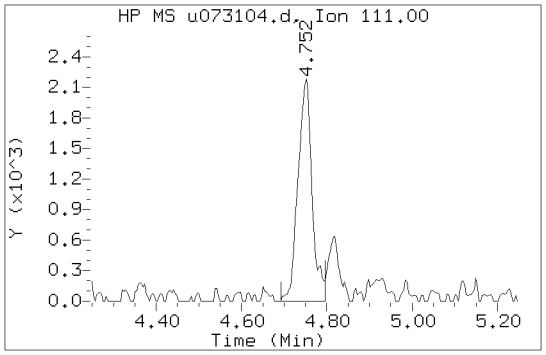
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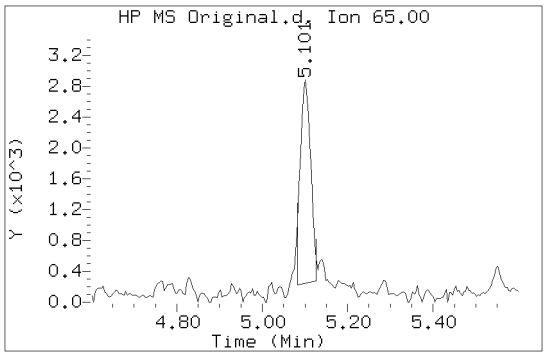


1,2-Dichloroethane-d4 (17060-07-0)

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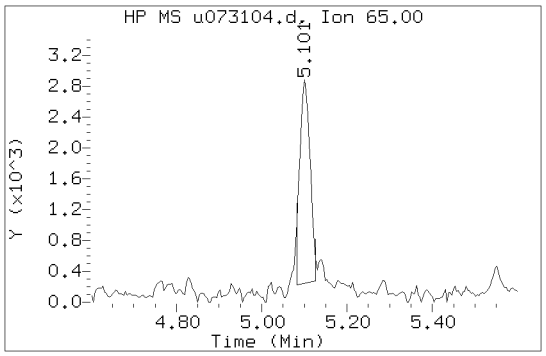
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AFTER

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21:03

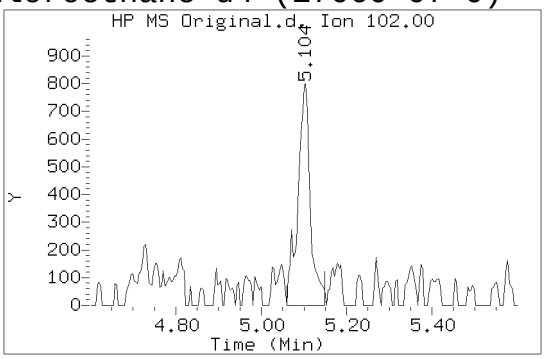


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InstruID : VOA9.i
LabSampID : VSTD001

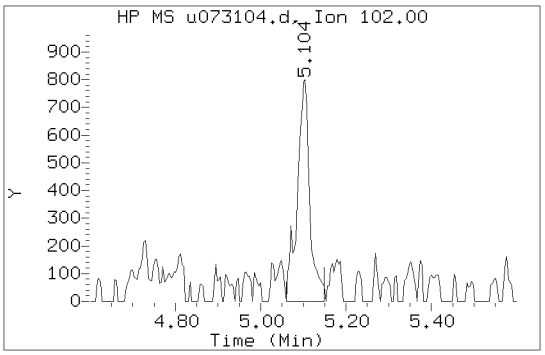
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

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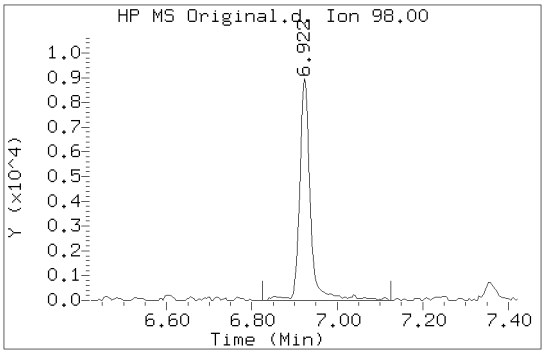
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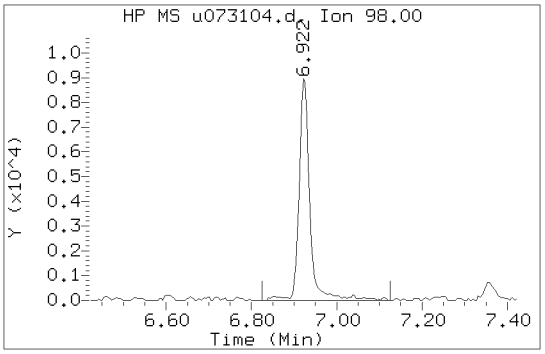
Toluene-d8 (2037-26-5)

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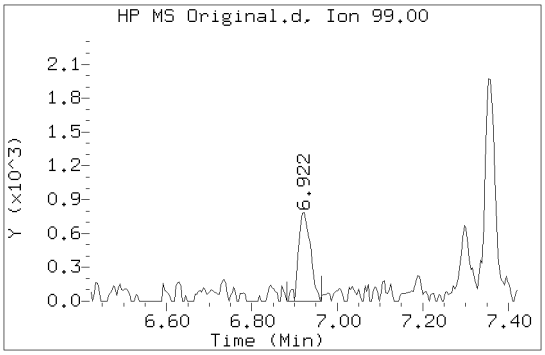
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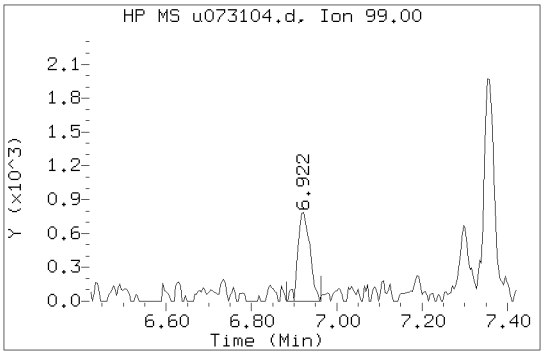
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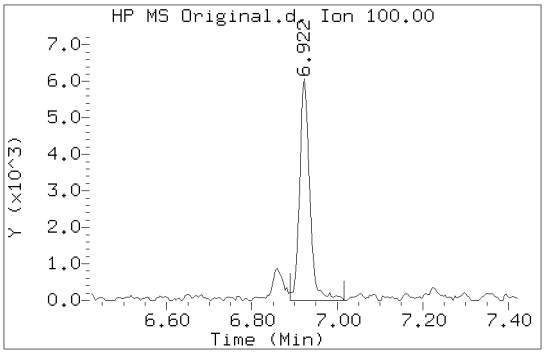
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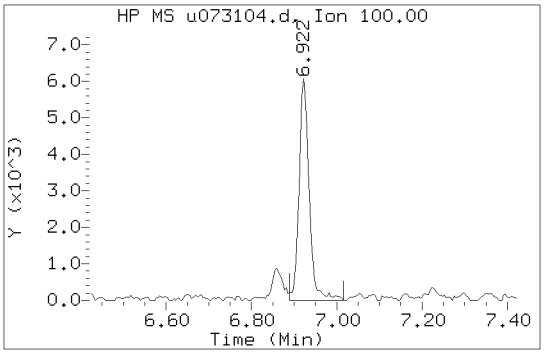
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01-Aug-2023
21:03



BEFORE
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01-Aug-2023
21:03



AFTER
MASS
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AREA
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HEIGHT
6074
01-Aug-2023
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Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073105.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073105.D
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Inj Date : 31-JUL-2023 12:59
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 12:37 Cal File: U073104.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.811	(1.000)	468693	50.0000	
2 Dichlorodifluoromethane	85	1.156	1.156	(0.240)	8215	2.00000	3.04
3 Chloromethane	50	1.291	1.291	(0.268)	13283	2.00000	2.08
5 Vinyl Chloride	62	1.370	1.370	(0.285)	8971	2.00000	1.94
6 Bromomethane	94	1.614	1.614	(0.335)	6564	2.00000	1.08(M)
7 Chloroethane	64	1.692	1.692	(0.352)	5305	2.00000	1.82(M)
8 Trichlorofluoromethane	101	1.884	1.884	(0.392)	10610	2.00000	1.86
9 Acrolein	56	1.741	1.741	(0.362)	1238	4.00000	4.11(M)
10 Acetone	43	2.405	2.405	(0.500)	11936	4.00000	0.62
11 1,1-Dichloroethene	96	2.322	2.322	(0.483)	5674	2.00000	1.83
15 Iodomethane	142	2.457	2.457	(0.511)	7768	4.00000	6.08
16 Acrylonitrile	53	3.061	3.061	(0.636)	5578	4.00000	3.78
17 Methylene Chloride	84	2.783	2.783	(0.579)	8023	2.00000	1.95(M)
18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	18902	2.00000	1.98
19 Carbon Disulfide	76	2.510	2.510	(0.522)	32799	4.00000	3.64
20 trans-1,2-Dichloroethene	96	3.050	3.050	(0.634)	6510	2.00000	1.88
21 Vinyl Acetate	43	3.604	3.604	(0.749)	35593	4.00000	3.59
22 1,1-Dichloroethane	63	3.507	3.507	(0.729)	13022	2.00000	2.05
24 2-Butanone	43	4.264	4.264	(0.886)	8816	4.00000	4.78
26 2,2-Dichloropropane	77	4.174	4.174	(0.868)	7870	2.00000	1.80

27 cis-1,2-Dichloroethene	96	4.189	4.189 (0.871)	7981	2.00000	2.06
28 Chloroform	83	4.564	4.564 (0.949)	15193	2.00000	2.06

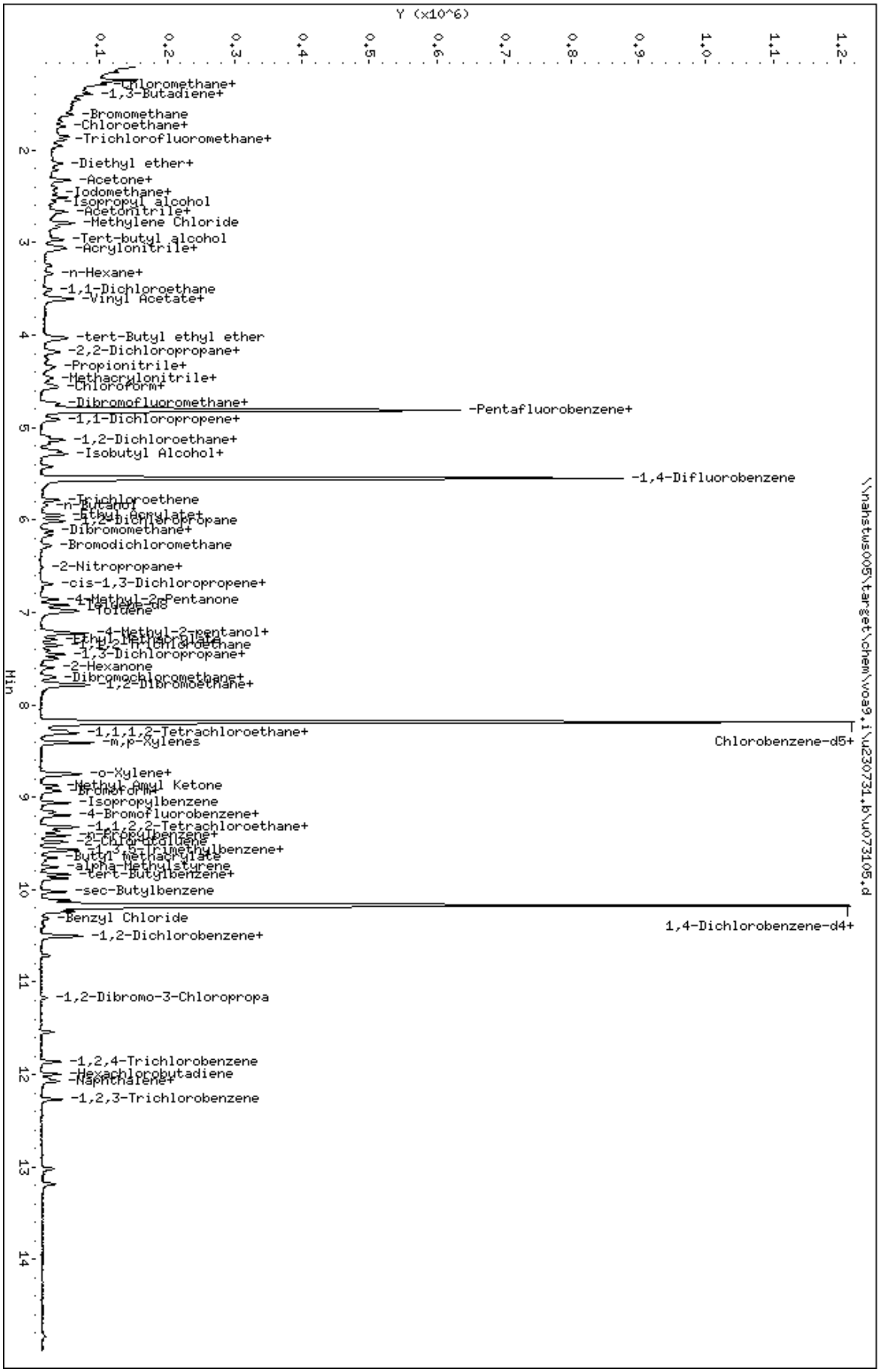
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.463	4.463	(0.928)	5201	2.00000	2.27
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	7770	2.00000	1.11
	31 1,1,1-Trichloroethane	97	4.736	4.736	(0.984)	11394	2.00000	1.98
	32 1,1-Dichloropropene	75	4.916	4.916	(0.886)	8773	2.00000	1.75
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	11573	2.00000	1.99
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	8430	2.00000	1.87(M)
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	8650	2.00000	0.83(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	674189	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	31991	2.00000	1.94
	38 Trichloroethene	130	5.786	5.786	(1.043)	9675	2.00000	2.07
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	10489	2.00000	1.99
	41 2-Chloroethylvinyl ether	63	6.558	6.558	(1.182)	335	4.00000	3.33(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	8542	2.00000	1.93
	44 Dibromomethane	93	6.120	6.120	(1.103)	6092	2.00000	2.14
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	18125	4.00000	3.76
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	9984	2.00000	3.62
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	646240	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	27056	2.00000	1.80(M)
	50 Toluene	91	6.982	6.982	(0.853)	30341	2.00000	1.72
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.297)	8865	2.00000	1.74(M)
	52 2-Hexanone	43	7.597	7.597	(0.928)	12966	4.00000	4.07
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	7548	2.00000	2.00
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	14778	2.00000	1.91
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	7857	2.00000	1.70
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	8155	2.00000	1.90
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	8420	2.00000	1.85
	58 1-Chlorohexane	55	8.193	8.193	(1.476)	7024	2.00000	1.99(M)
	59 Chlorobenzene	112	8.208	8.208	(1.003)	24937	2.00000	2.00
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	8228	2.00000	1.81
	61 Ethylbenzene	106	8.305	8.305	(1.015)	9991	2.00000	1.77
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	21620	4.00000	3.26
	63 o-Xylene	106	8.748	8.748	(1.069)	10538	2.00000	1.62
	64 Styrene	104	8.763	8.763	(1.071)	16730	2.00000	1.65(M)
	66 Bromoform	173	8.920	8.920	(1.090)	6380	2.00000	1.97
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	26994	2.00000	1.72
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	14362	2.00000	2.21
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	12870	2.00000	0.86
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	336159	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	11095	2.00000	1.96
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	26996	2.00000	3.02
	74 Bromobenzene	156	9.317	9.317	(0.916)	10989	2.00000	1.97
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	20476	2.00000	1.74
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	22346	2.00000	1.88
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	24006	2.00000	1.81
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	19034	2.00000	1.71
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	21418	2.00000	1.80
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	23804	2.00000	1.48(M)
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	21012	2.00000	1.56(M)
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	17878	2.00000	1.92
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	21697	2.00000	2.10
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	17310	2.00000	3.84(M)
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	19465	2.00000	2.04

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1852	2.00000	1.98
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	9772	2.00000	1.66

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	5519	2.00000	1.68(M)
	92 Naphthalene	128	12.073	12.073	(1.187)	22645	2.00000	3.00
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	11209	2.00000	1.87
M	94 1,2-Dichloroethylene (total)	96				14491	4.00000	
M	95 Xylenes (total)	106				32158	6.00000	
	135 1,4-Dioxane	88	6.172	6.172	(1.283)	2926	40.0000	43.54(M)
	141 Cyclohexane	56	4.778	4.778	(0.993)	10228	2.00000	1.94(M)
	138 Freon TF	101	2.326	2.326	(0.483)	5602	2.00000	1.40
	140 1,3-Butadiene	54	1.393	1.393	(0.290)	7226	2.00000	1.93
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	17254	2.00000	1.75(M)
	146 Methyl Acetate	43	2.708	2.708	(0.563)	7184	2.00000	2.13(M)
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.617)	21792	40.0000	52.35
	149 Isopropyl Alcohol	45	2.558	2.558	(0.532)	11717	40.0000	45.23(TM)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\voa9,i\u230731,b\u073105,d
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Column phase: DB624

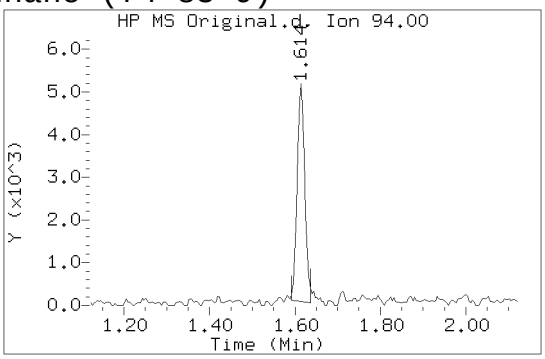
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Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

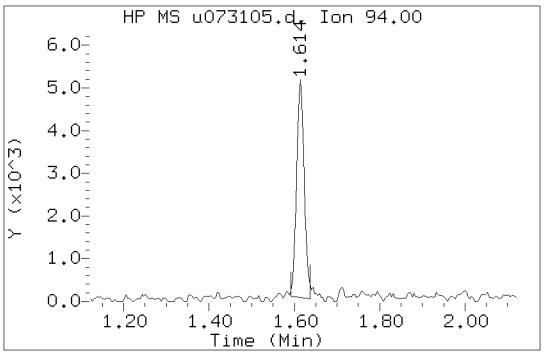
Bromomethane (74-83-9)

Reason Code:

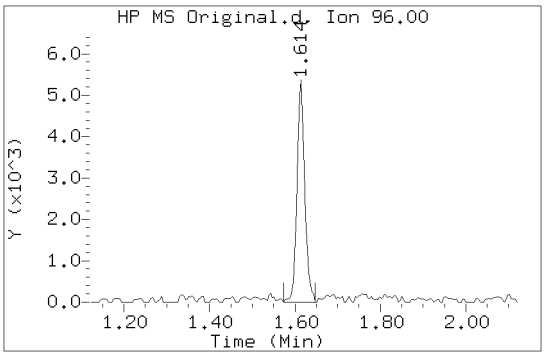
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01-Aug-2023
21:03



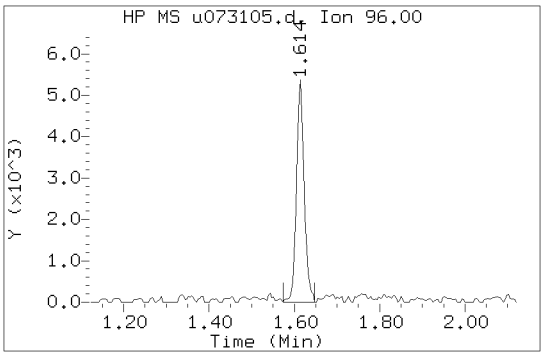
AFTER
MASS
94
AREA
6564
HEIGHT
5102
01-Aug-2023
21:03



BEFORE
MASS
96
AREA
7003
HEIGHT
5370
01-Aug-2023
21:03



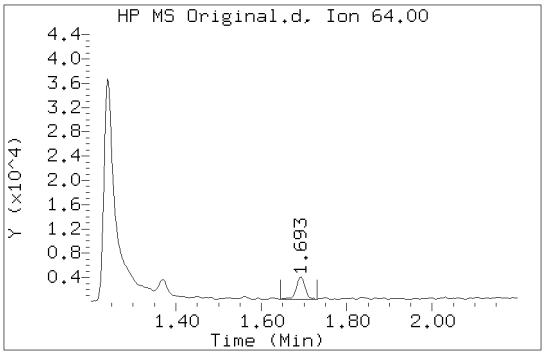
AFTER
MASS
96
AREA
7003
HEIGHT
5370
01-Aug-2023
21:03



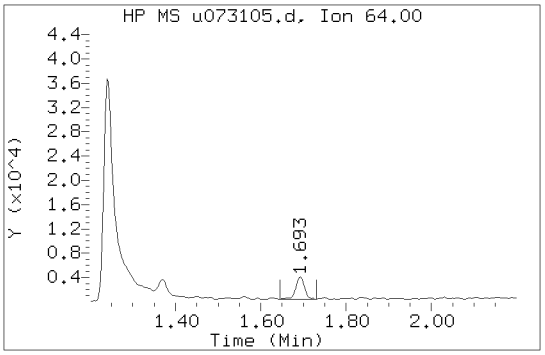
Chloroethane (75-00-3)

Reason Code:

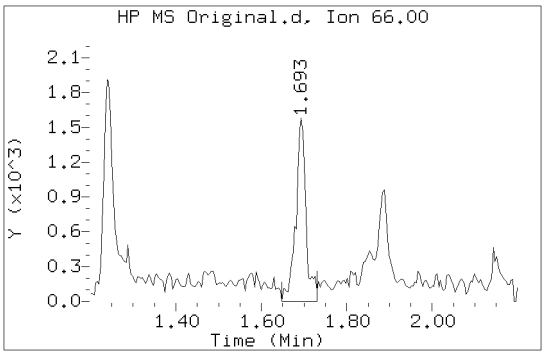
BEFORE
MASS
64
AREA
5305
HEIGHT
3723
01-Aug-2023
21:03



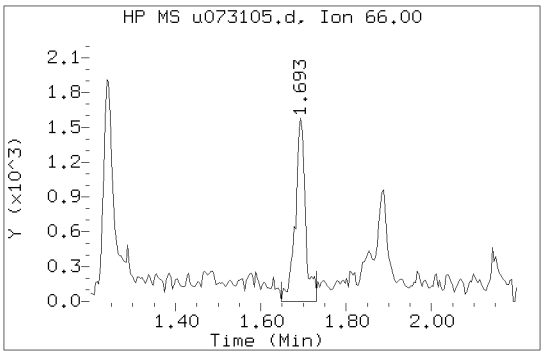
AFTER
MASS
64
AREA
5305
HEIGHT
3723
01-Aug-2023
21:03



BEFORE
MASS
66
AREA
2621
HEIGHT
1580
01-Aug-2023
21:03



AFTER
MASS
66
AREA
2621
HEIGHT
1580
01-Aug-2023
21:03



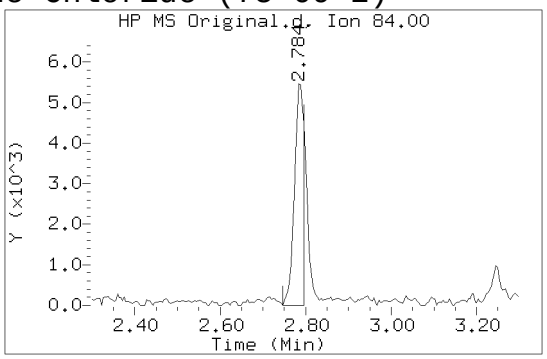
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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

Methylene Chloride (75-09-2)

Reason Code:

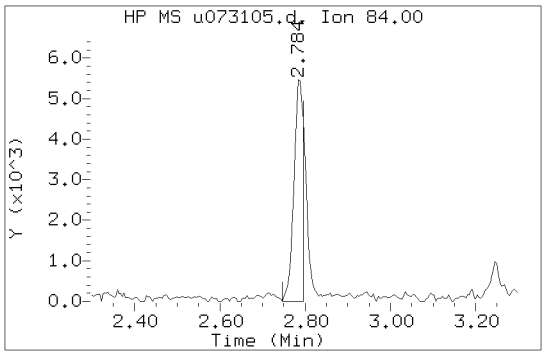
BEFORE

MASS
84
AREA
8023
HEIGHT
5467
01-Aug-2023
21:03



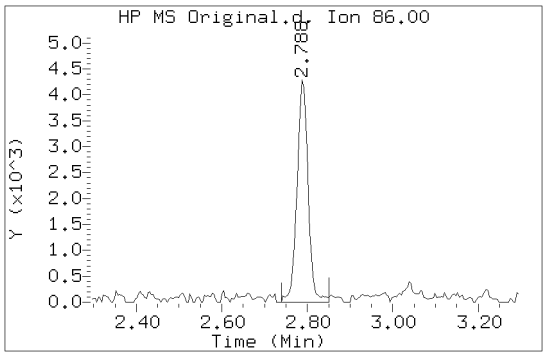
AFTER

MASS
84
AREA
8023
HEIGHT
5467
01-Aug-2023
21:03



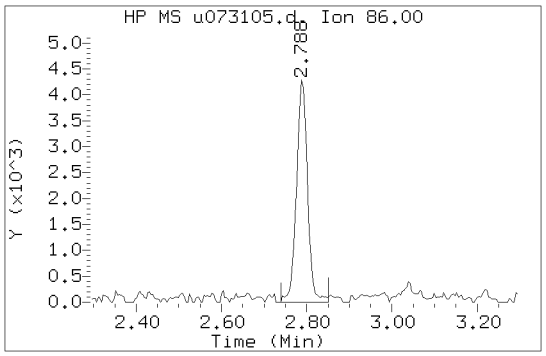
BEFORE

MASS
86
AREA
7835
HEIGHT
4288
01-Aug-2023
21:03



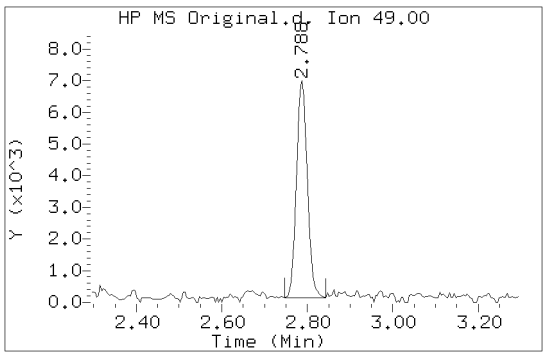
AFTER

MASS
86
AREA
7835
HEIGHT
4288
01-Aug-2023
21:03



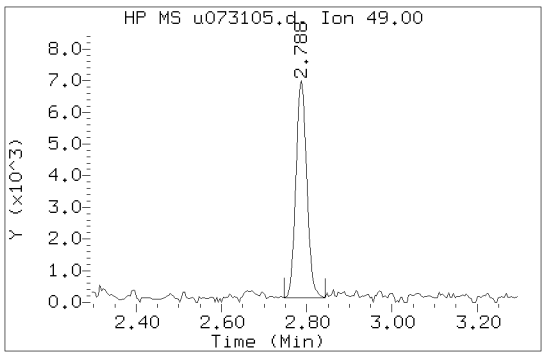
BEFORE

MASS
49
AREA
12243
HEIGHT
6849
01-Aug-2023
21:03



AFTER

MASS
49
AREA
12243
HEIGHT
6849
01-Aug-2023
21:03

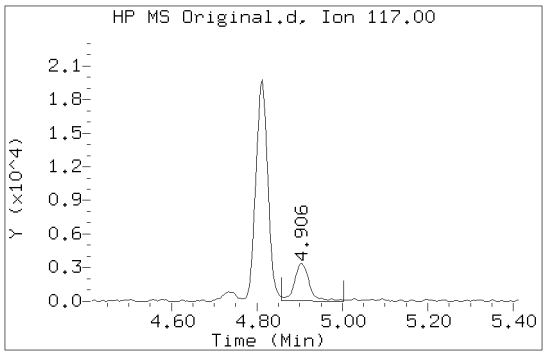


Carbon Tetrachloride (56-23-5)

Reason Code:

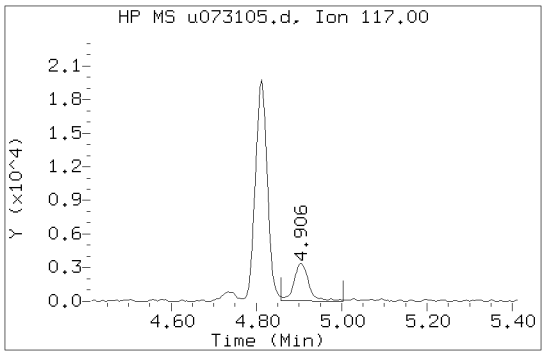
BEFORE

MASS
117
AREA
8430
HEIGHT
3364
01-Aug-2023
21:03



AFTER

MASS
117
AREA
8430
HEIGHT
3364
01-Aug-2023
21:03

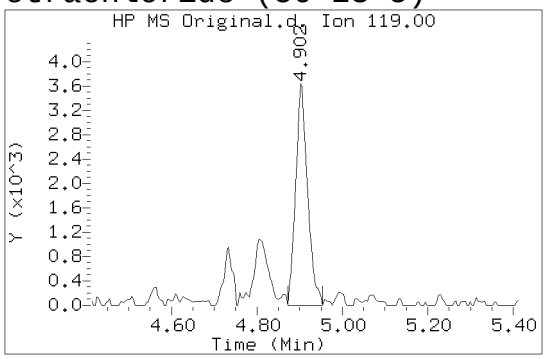


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

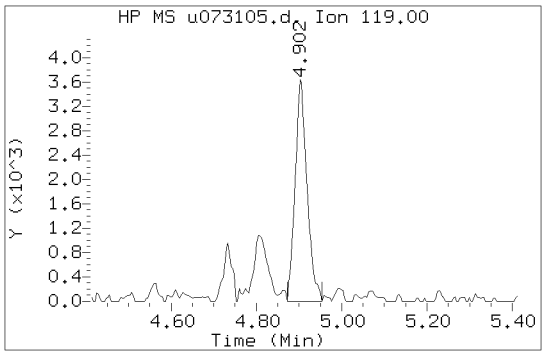
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
119
AREA
7191
HEIGHT
3637
01-Aug-2023
21:03



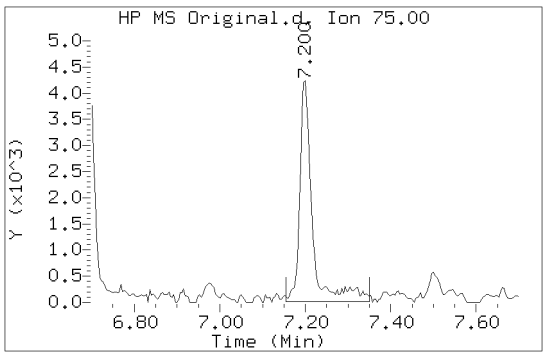
AFTER
MASS
119
AREA
7191
HEIGHT
3637
01-Aug-2023
21:03



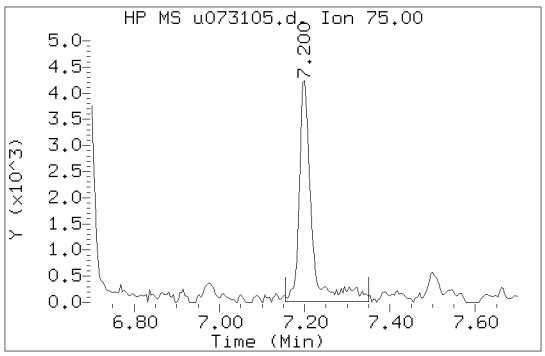
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

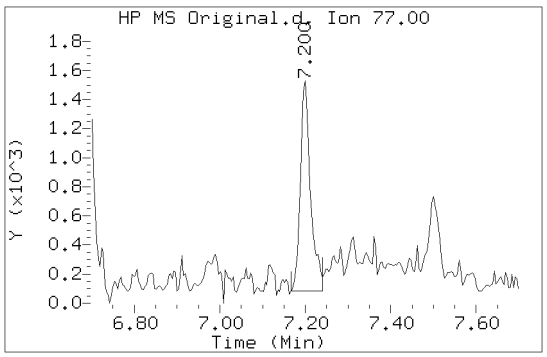
BEFORE
MASS
75
AREA
8865
HEIGHT
4230
01-Aug-2023
21:03



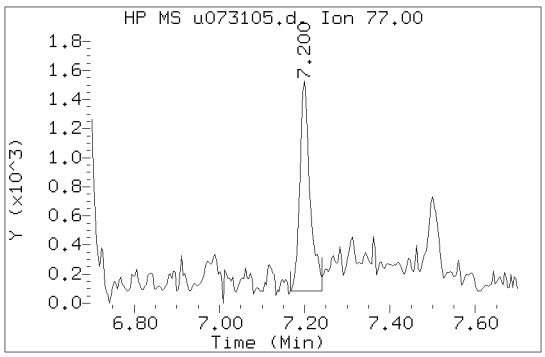
AFTER
MASS
75
AREA
8865
HEIGHT
4230
01-Aug-2023
21:03



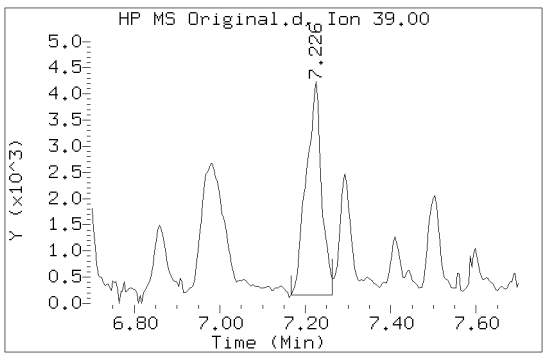
BEFORE
MASS
77
AREA
2451
HEIGHT
1445
01-Aug-2023
21:03



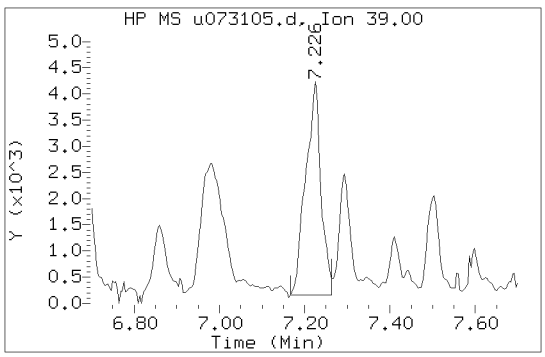
AFTER
MASS
77
AREA
2451
HEIGHT
1445
01-Aug-2023
21:03



BEFORE
MASS
39
AREA
10265
HEIGHT
4080
01-Aug-2023
21:03



AFTER
MASS
39
AREA
10265
HEIGHT
4080
01-Aug-2023
21:03

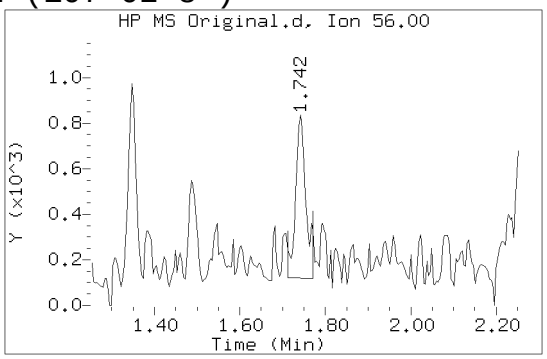


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

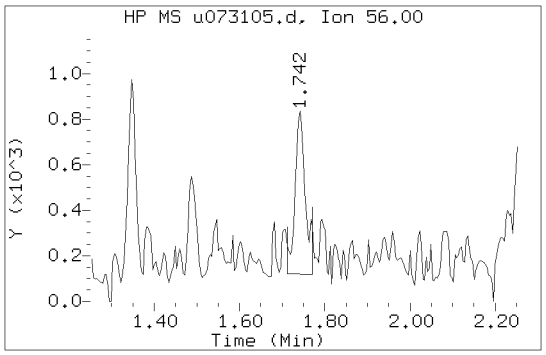
Acrolein (107-02-8)

Reason Code:

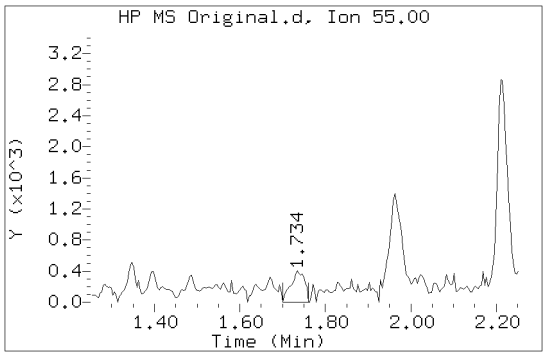
BEFORE
MASS
56
AREA
1238
HEIGHT
717
01-Aug-2023
21:03



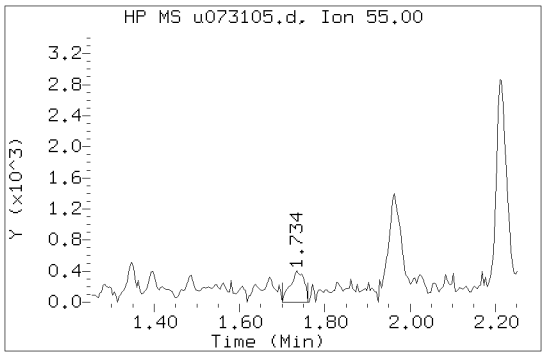
AFTER
MASS
56
AREA
1238
HEIGHT
717
01-Aug-2023
21:03



BEFORE
MASS
55
AREA
889
HEIGHT
407
01-Aug-2023
21:03



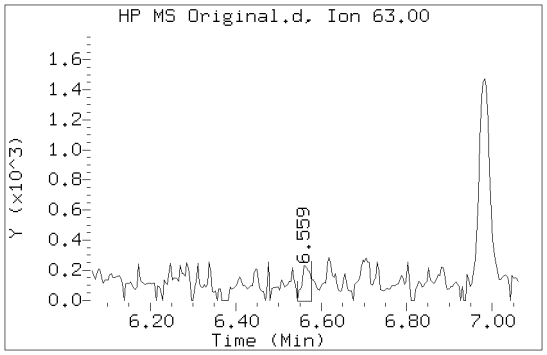
AFTER
MASS
55
AREA
889
HEIGHT
407
01-Aug-2023
21:03



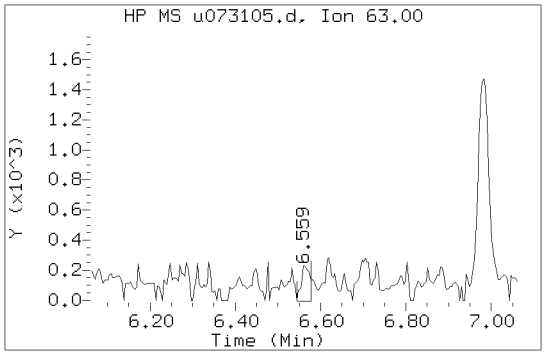
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

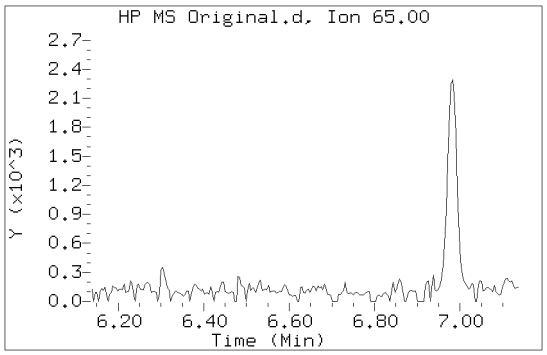
BEFORE
MASS
63
AREA
335
HEIGHT
235
01-Aug-2023
21:03



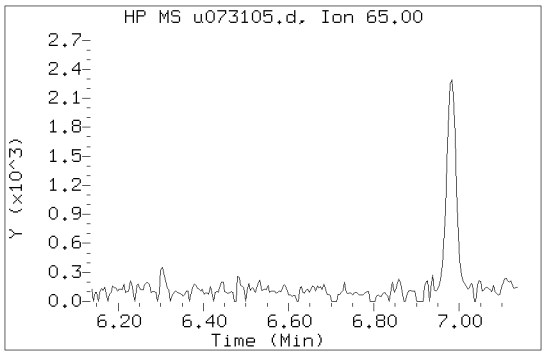
AFTER
MASS
63
AREA
335
HEIGHT
235
01-Aug-2023
21:03



BEFORE
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



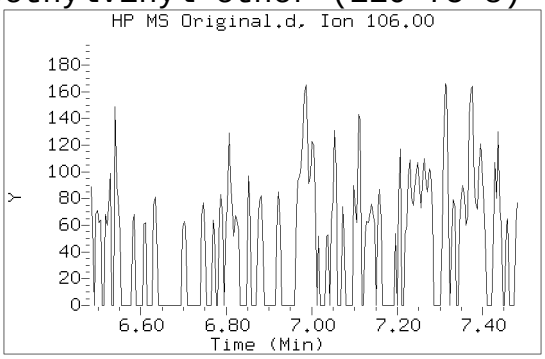
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073105.d
Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

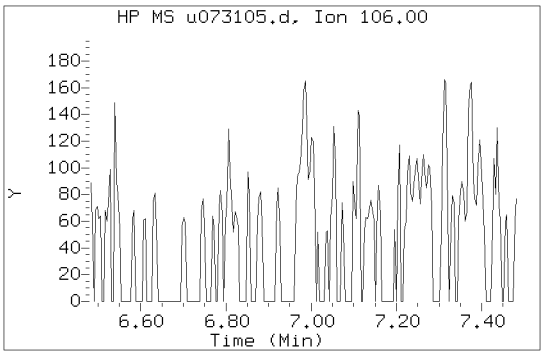
BEFORE

MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03

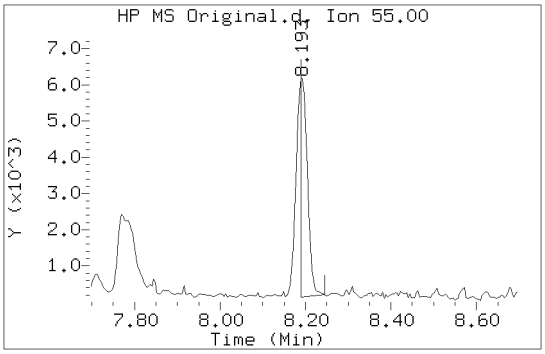


1-Chlorohexane (544-10-5)

Reason Code:

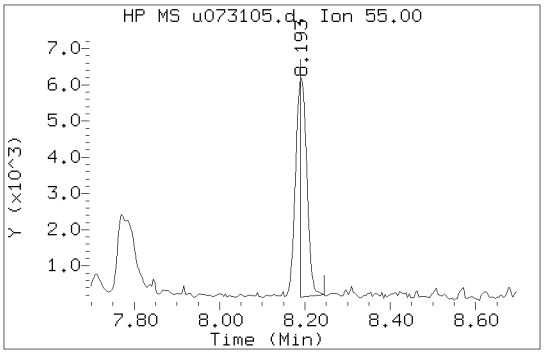
BEFORE

MASS
55
AREA
7024
HEIGHT
6030
01-Aug-2023
21:03



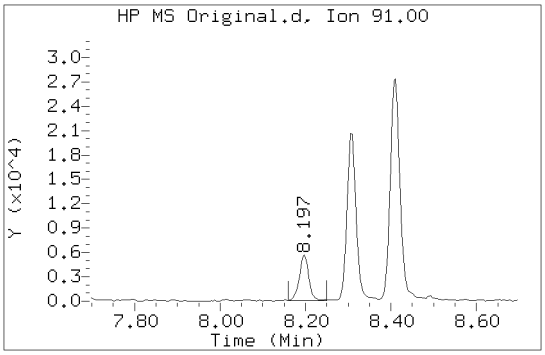
AFTER

MASS
55
AREA
7024
HEIGHT
6030
01-Aug-2023
21:03



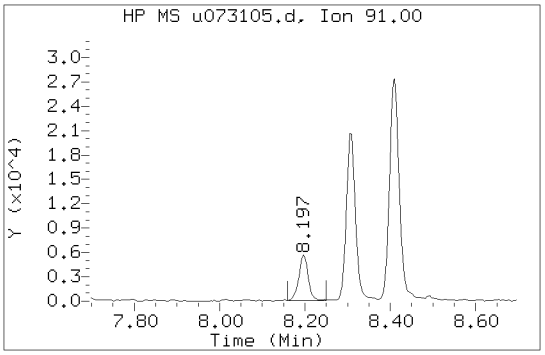
BEFORE

MASS
91
AREA
8656
HEIGHT
5589
01-Aug-2023
21:03



AFTER

MASS
91
AREA
8656
HEIGHT
5589
01-Aug-2023
21:03

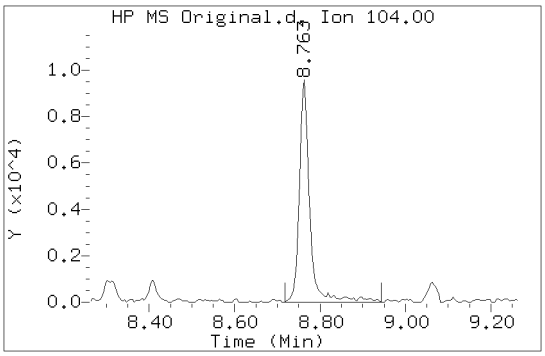


Styrene (100-42-5)

Reason Code:

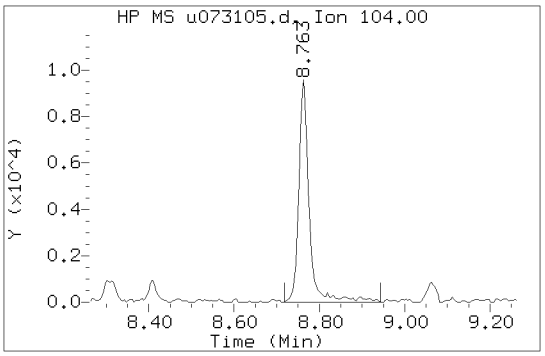
BEFORE

MASS
104
AREA
16730
HEIGHT
9582
01-Aug-2023
21:03



AFTER

MASS
104
AREA
16730
HEIGHT
9582
01-Aug-2023
21:03



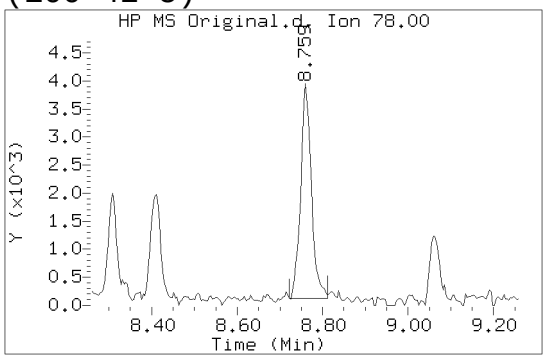
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073105.d
Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

Styrene (100-42-5)

Reason Code:

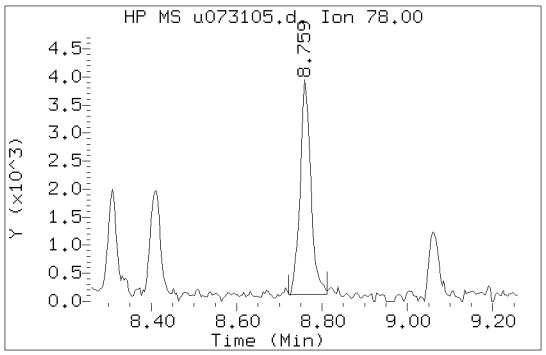
BEFORE

MASS
78
AREA
6853
HEIGHT
3826
01-Aug-2023
21:03



AFTER

MASS
78
AREA
6853
HEIGHT
3826
01-Aug-2023
21:03

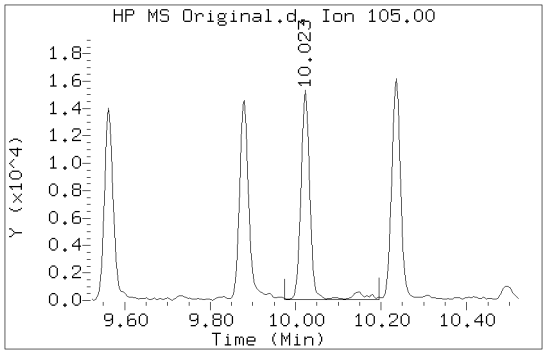


sec-Butylbenzene (135-98-8)

Reason Code:

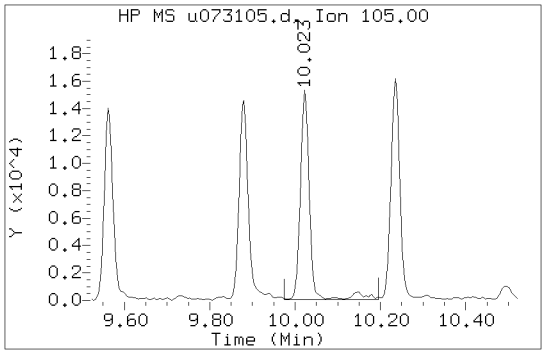
BEFORE

MASS
105
AREA
23804
HEIGHT
15302
01-Aug-2023
21:03



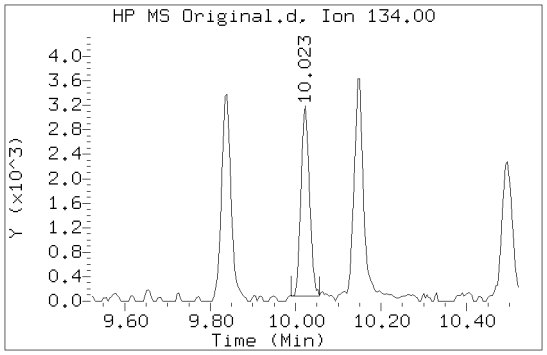
AFTER

MASS
105
AREA
23804
HEIGHT
15302
01-Aug-2023
21:03



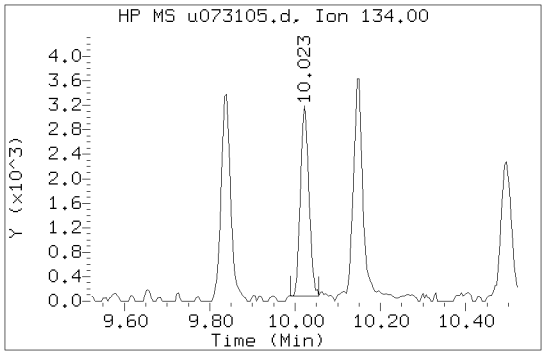
BEFORE

MASS
134
AREA
4423
HEIGHT
3109
01-Aug-2023
21:03



AFTER

MASS
134
AREA
4423
HEIGHT
3109
01-Aug-2023
21:03

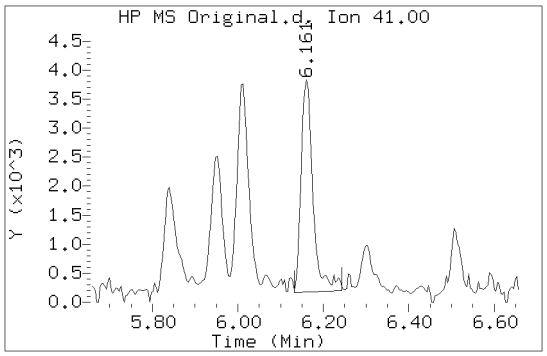


Methyl Methacrylate (80-62-6)

Reason Code:

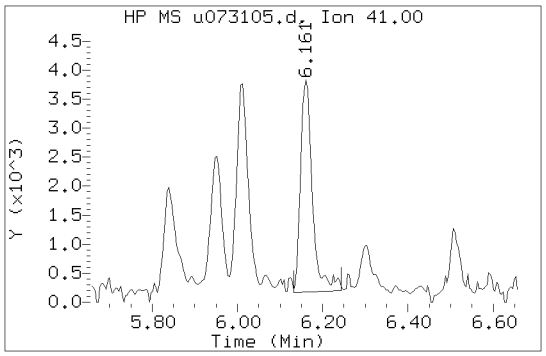
BEFORE

MASS
41
AREA
7198
HEIGHT
3653
01-Aug-2023
21:03



AFTER

MASS
41
AREA
7198
HEIGHT
3653
01-Aug-2023
21:03

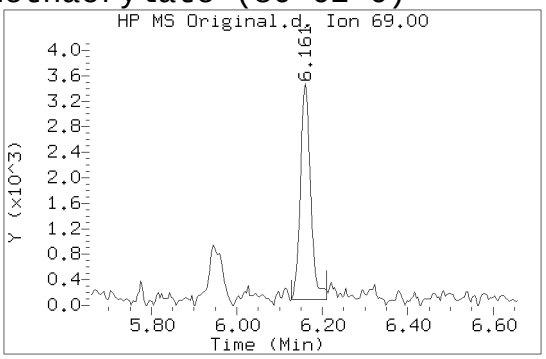


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

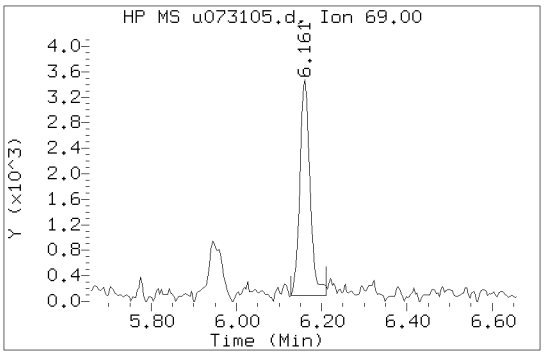
Methyl Methacrylate (80-62-6)

Reason Code:

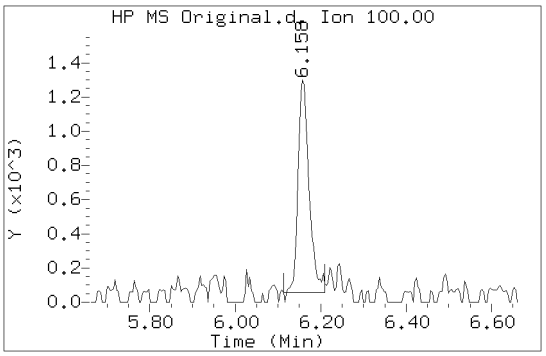
BEFORE
MASS
69
AREA
5750
HEIGHT
3389
01-Aug-2023
21:03



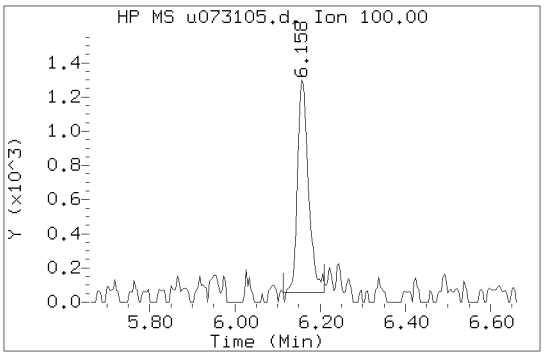
AFTER
MASS
69
AREA
5750
HEIGHT
3389
01-Aug-2023
21:03



BEFORE
MASS
100
AREA
2274
HEIGHT
1243
01-Aug-2023
21:03



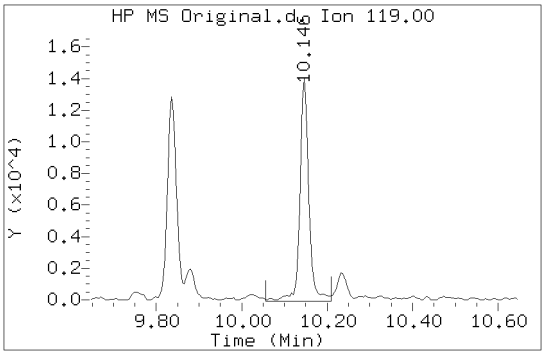
AFTER
MASS
100
AREA
2274
HEIGHT
1243
01-Aug-2023
21:03



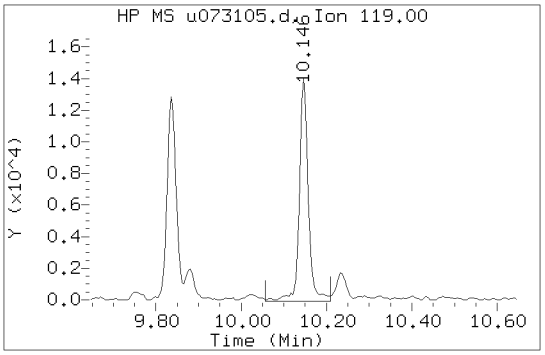
p-Isopropyltoluene (99-87-6)

Reason Code:

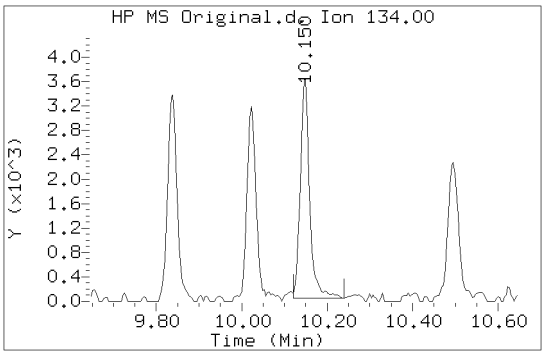
BEFORE
MASS
119
AREA
21012
HEIGHT
14059
01-Aug-2023
21:03



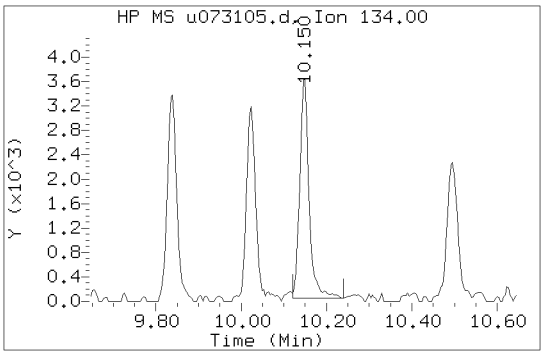
AFTER
MASS
119
AREA
21012
HEIGHT
14059
01-Aug-2023
21:03



BEFORE
MASS
134
AREA
5521
HEIGHT
3574
01-Aug-2023
21:03



AFTER
MASS
134
AREA
5521
HEIGHT
3574
01-Aug-2023
21:03



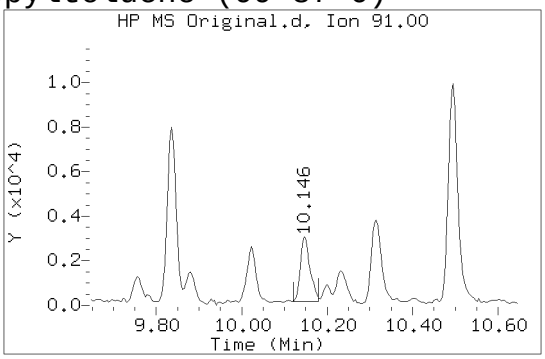
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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

p-Isopropyltoluene (99-87-6)

Reason Code:

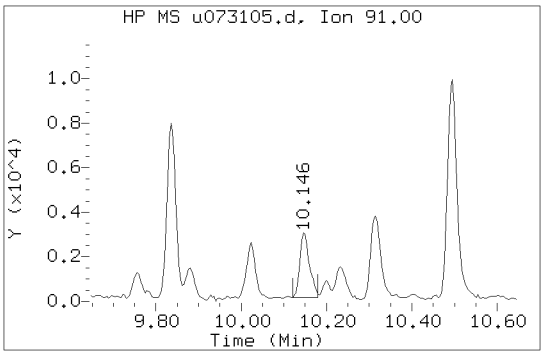
BEFORE

MASS
91
AREA
4681
HEIGHT
2906
01-Aug-2023
21:03



AFTER

MASS
91
AREA
4681
HEIGHT
2906
01-Aug-2023
21:03

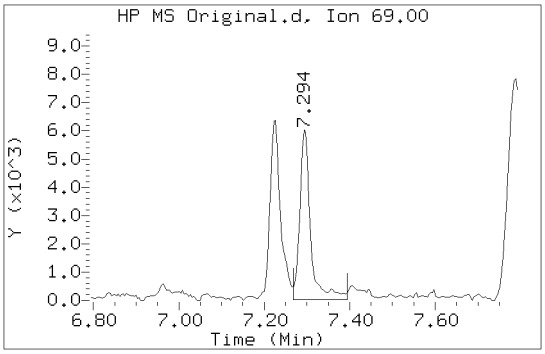


Ethyl Methacrylate (97-63-2)

Reason Code:

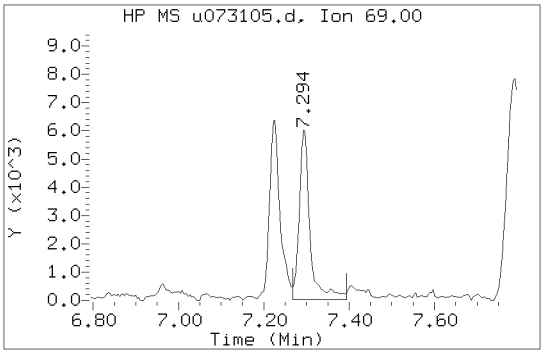
BEFORE

MASS
69
AREA
10845
HEIGHT
6021
01-Aug-2023
21:03



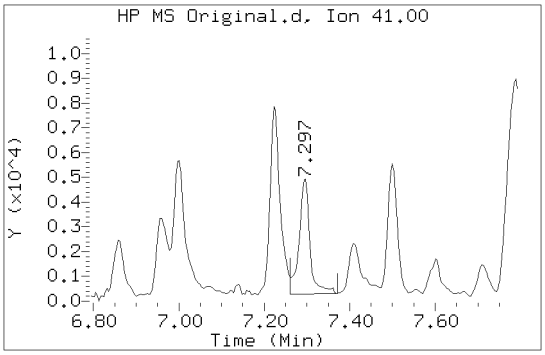
AFTER

MASS
69
AREA
10845
HEIGHT
6021
01-Aug-2023
21:03



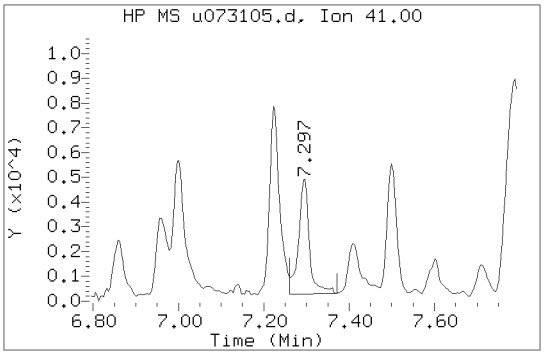
BEFORE

MASS
41
AREA
8474
HEIGHT
4635
01-Aug-2023
21:03



AFTER

MASS
41
AREA
8474
HEIGHT
4635
01-Aug-2023
21:03

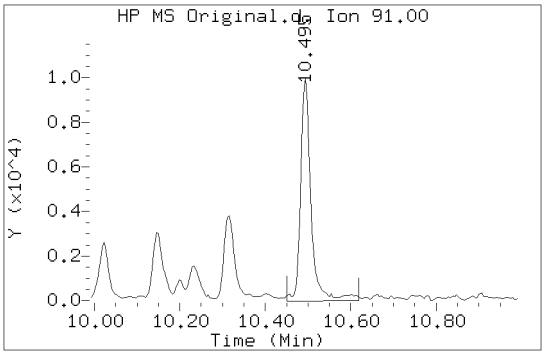


n-Butylbenzene (104-51-8)

Reason Code:

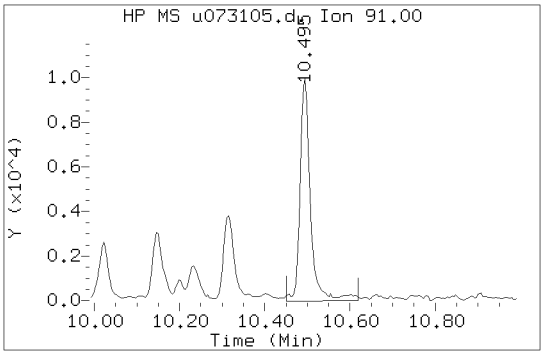
BEFORE

MASS
91
AREA
17310
HEIGHT
9967
01-Aug-2023
21:03



AFTER

MASS
91
AREA
17310
HEIGHT
9967
01-Aug-2023
21:03

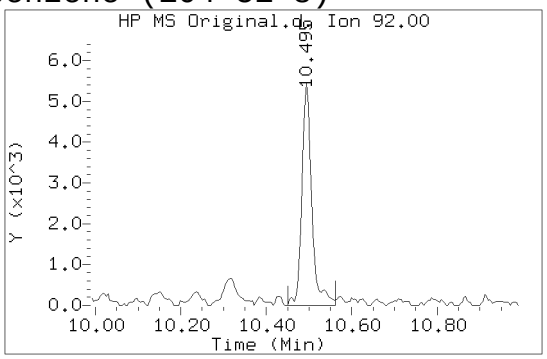


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

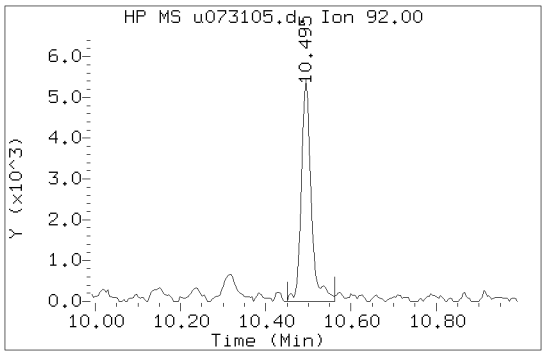
n-Butylbenzene (104-51-8)

Reason Code:

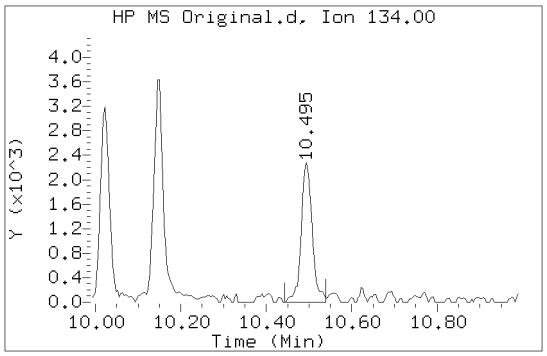
BEFORE
MASS
92
AREA
8944
HEIGHT
5435
01-Aug-2023
21:03



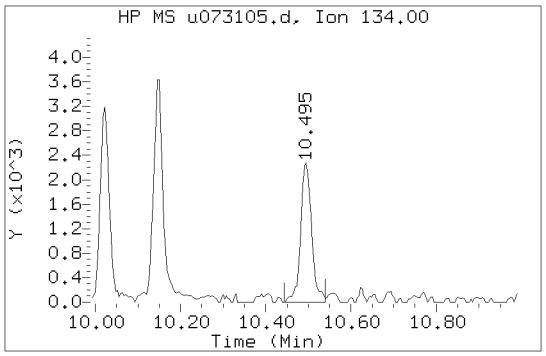
AFTER
MASS
92
AREA
8944
HEIGHT
5435
01-Aug-2023
21:03



BEFORE
MASS
134
AREA
4164
HEIGHT
2274
01-Aug-2023
21:03



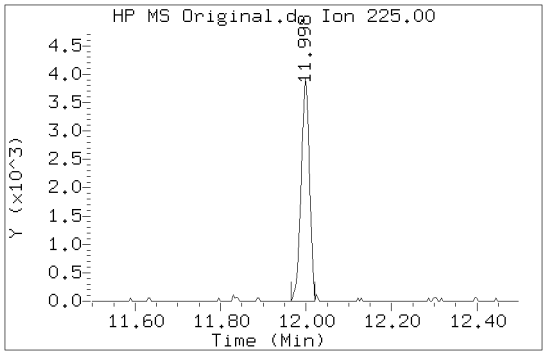
AFTER
MASS
134
AREA
4164
HEIGHT
2274
01-Aug-2023
21:03



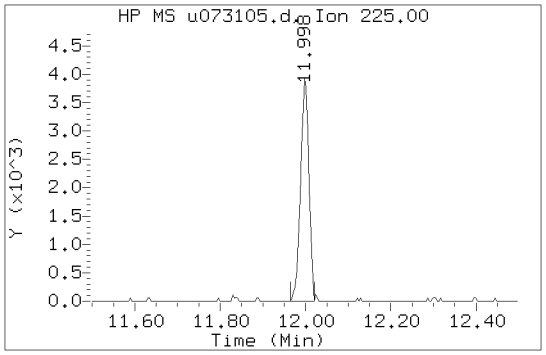
Hexachlorobutadiene (87-68-3)

Reason Code:

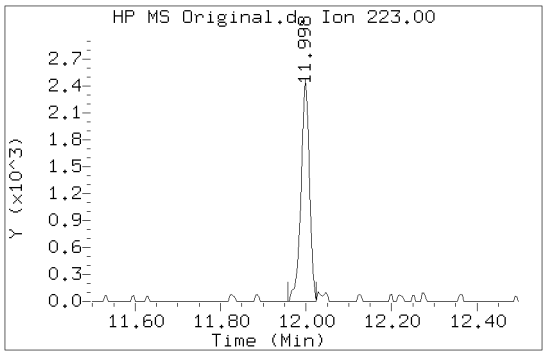
BEFORE
MASS
225
AREA
5519
HEIGHT
3917
01-Aug-2023
21:03



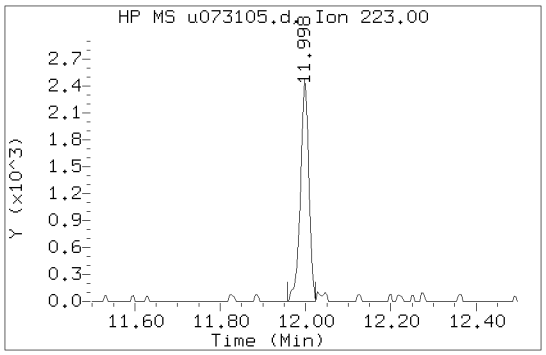
AFTER
MASS
225
AREA
5519
HEIGHT
3917
01-Aug-2023
21:03



BEFORE
MASS
223
AREA
3509
HEIGHT
2471
01-Aug-2023
21:03



AFTER
MASS
223
AREA
3509
HEIGHT
2471
01-Aug-2023
21:03

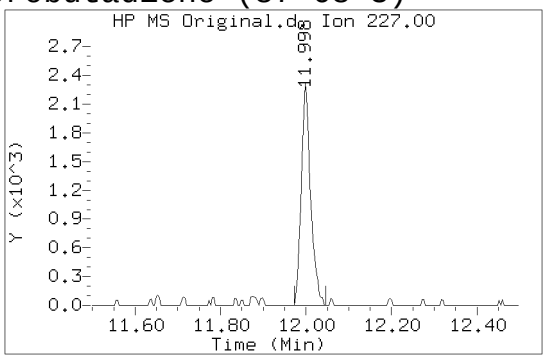


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

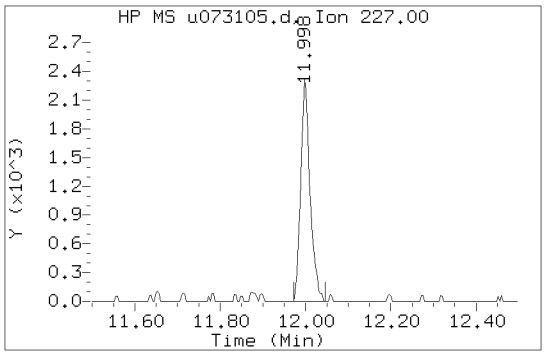
BEFORE

MASS
227
AREA
3623
HEIGHT
2314
01-Aug-2023
21:03



AFTER

MASS
227
AREA
3623
HEIGHT
2314
01-Aug-2023
21:03

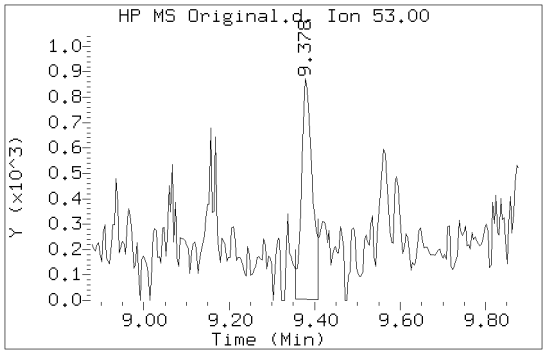


Reason Code:

trans-1,4-Dichloro-2-butene (110-57-6)

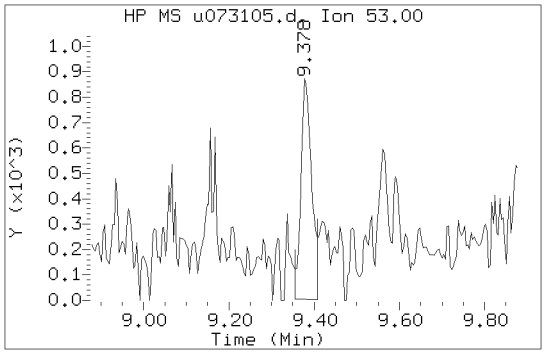
BEFORE

MASS
53
AREA
1567
HEIGHT
868
01-Aug-2023
21:03



AFTER

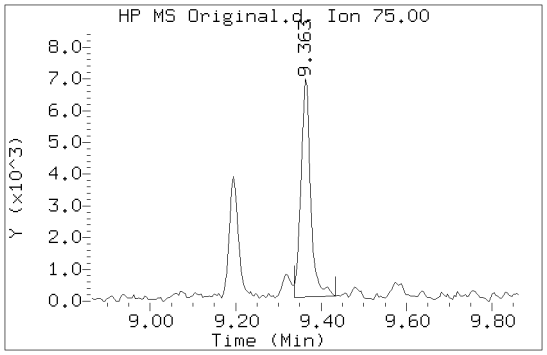
MASS
53
AREA
1567
HEIGHT
868
01-Aug-2023
21:03



Reason Code:

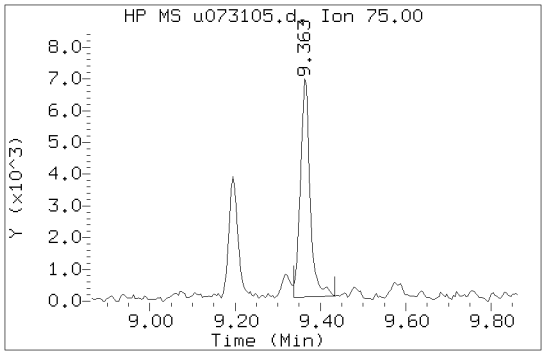
BEFORE

MASS
75
AREA
11095
HEIGHT
6863
01-Aug-2023
21:03



AFTER

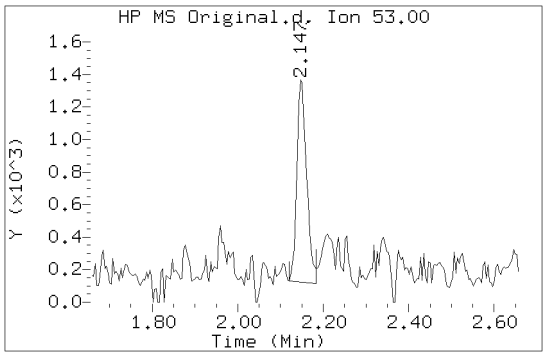
MASS
75
AREA
11095
HEIGHT
6863
01-Aug-2023
21:03



Chloroprene (126-99-8)

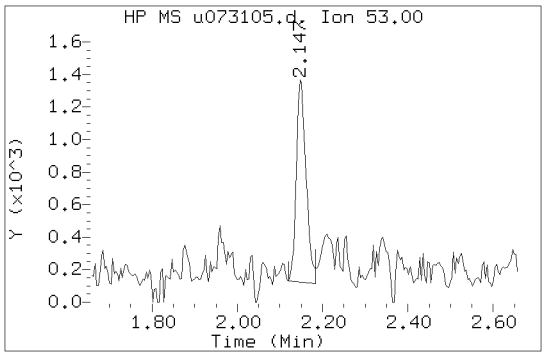
BEFORE

MASS
53
AREA
2033
HEIGHT
1244
01-Aug-2023
21:03



AFTER

MASS
53
AREA
2033
HEIGHT
1244
01-Aug-2023
21:03



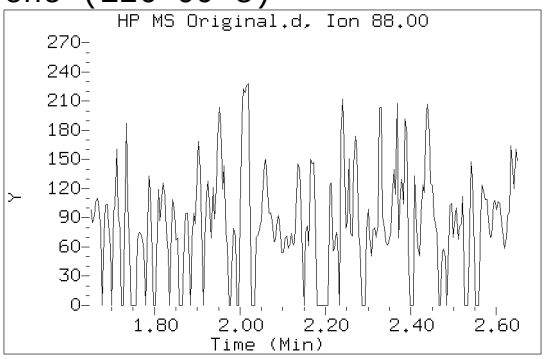
Reason Code:

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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

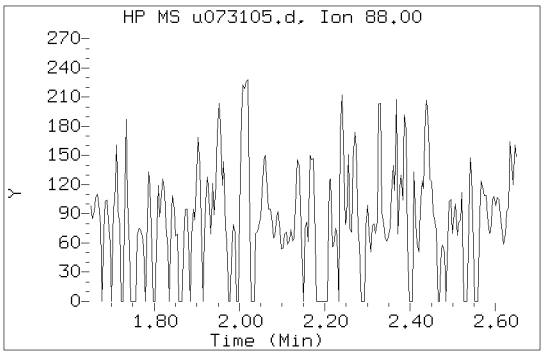
Chloroprene (126-99-8)

Reason Code:

BEFORE
MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



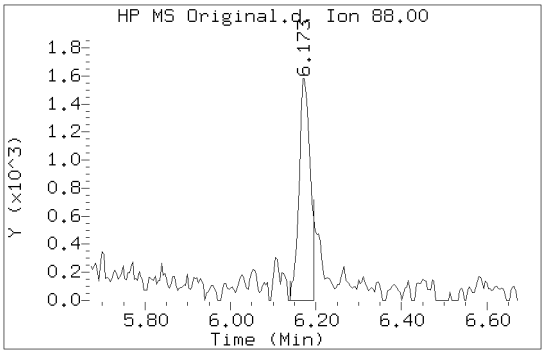
AFTER
MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



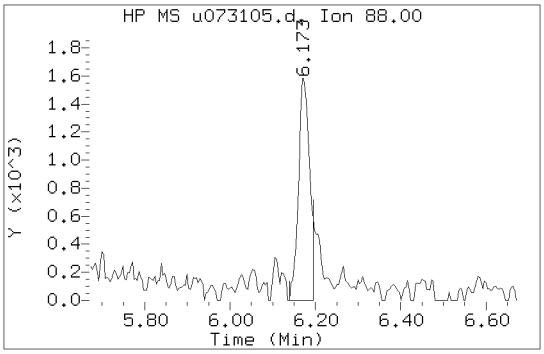
1,4-Dioxane ()

Reason Code:

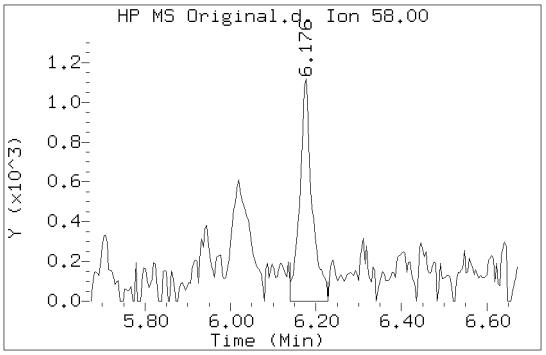
BEFORE
MASS
88
AREA
2926
HEIGHT
1580
01-Aug-2023
21:03



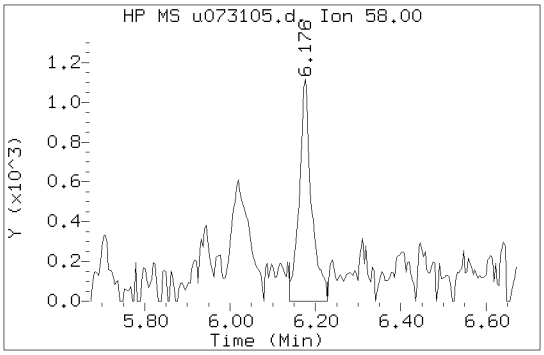
AFTER
MASS
88
AREA
2926
HEIGHT
1580
01-Aug-2023
21:03



BEFORE
MASS
58
AREA
2267
HEIGHT
1118
01-Aug-2023
21:03



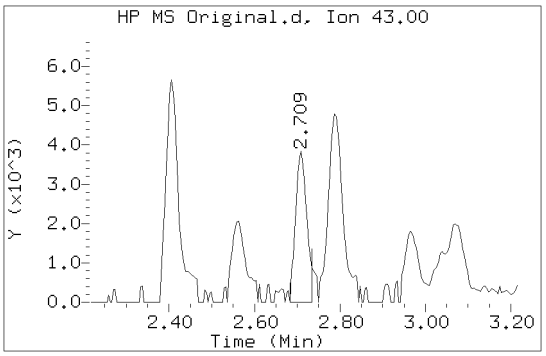
AFTER
MASS
58
AREA
2267
HEIGHT
1118
01-Aug-2023
21:03



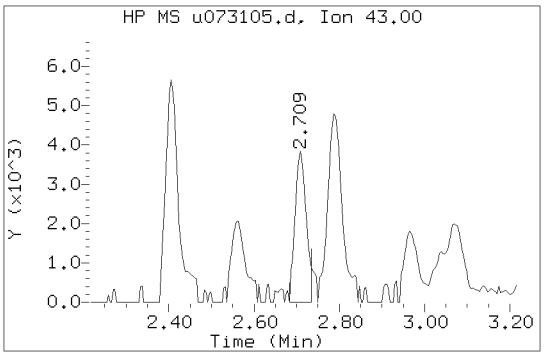
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
43
AREA
7184
HEIGHT
3842
01-Aug-2023
21:03



AFTER
MASS
43
AREA
7184
HEIGHT
3842
01-Aug-2023
21:03

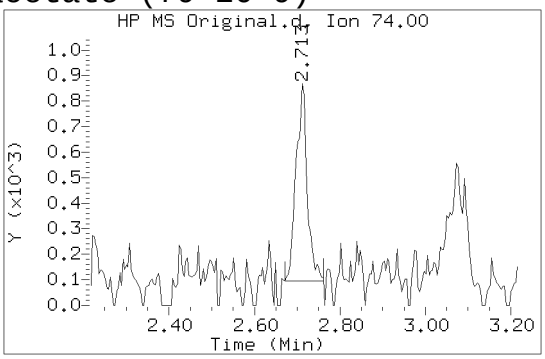


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

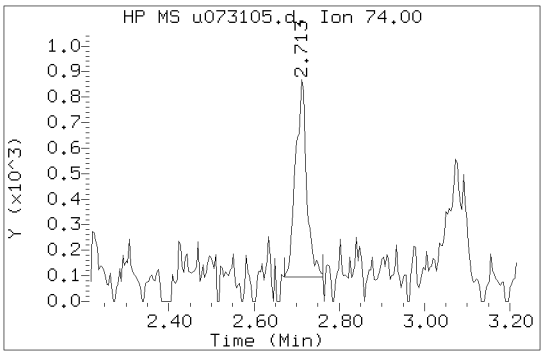
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
74
AREA
1420
HEIGHT
772
01-Aug-2023
21:03



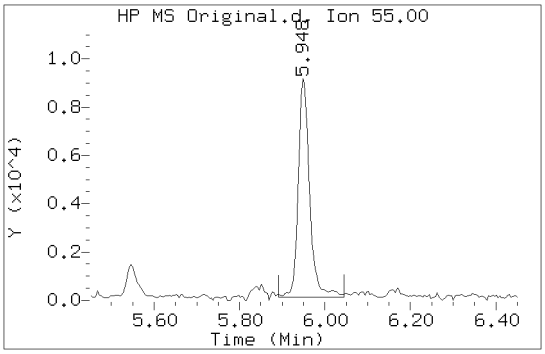
AFTER
MASS
74
AREA
1420
HEIGHT
772
01-Aug-2023
21:03



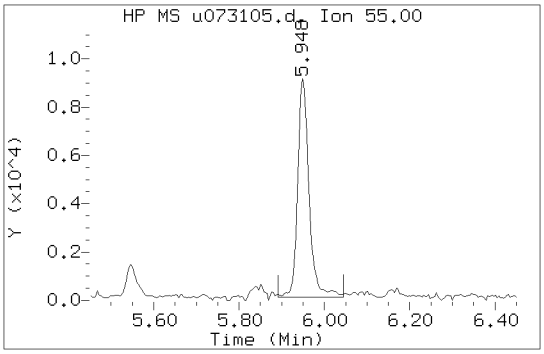
Methylcyclohexane (108-87-2)

Reason Code:

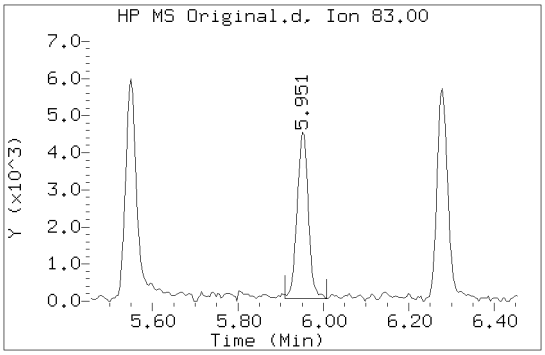
BEFORE
MASS
55
AREA
17254
HEIGHT
9046
01-Aug-2023
21:03



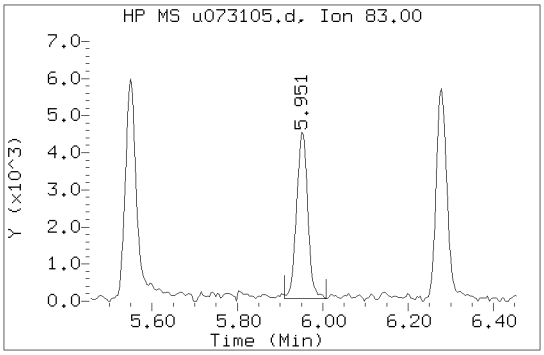
AFTER
MASS
55
AREA
17254
HEIGHT
9046
01-Aug-2023
21:03



BEFORE
MASS
83
AREA
8345
HEIGHT
4478
01-Aug-2023
21:03



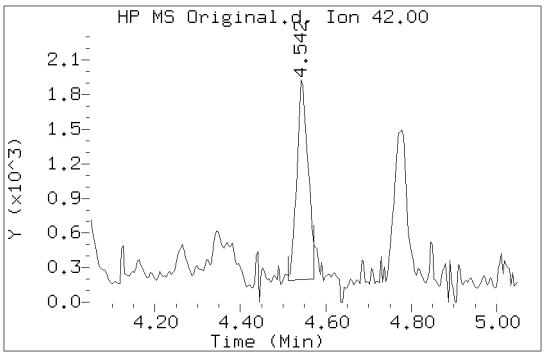
AFTER
MASS
83
AREA
8345
HEIGHT
4478
01-Aug-2023
21:03



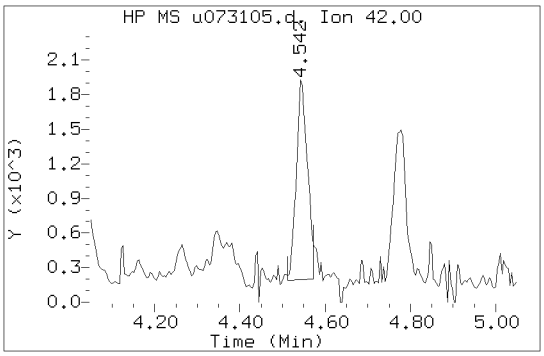
Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
MASS
42
AREA
3194
HEIGHT
1734
01-Aug-2023
21:03



AFTER
MASS
42
AREA
3194
HEIGHT
1734
01-Aug-2023
21:03

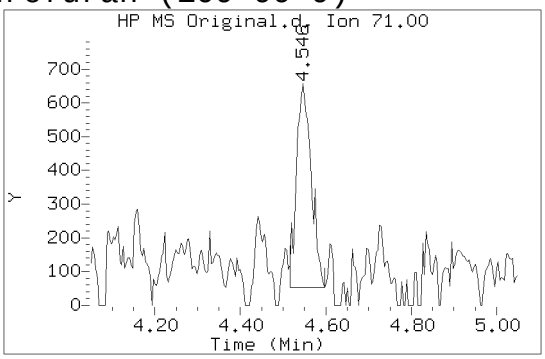


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

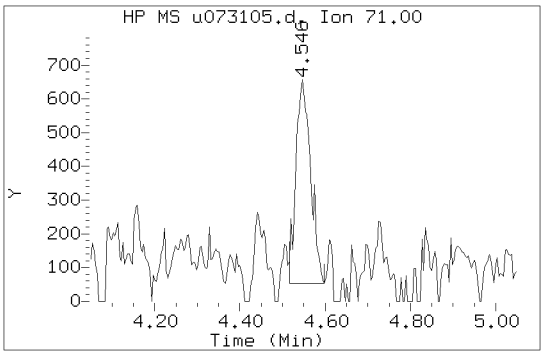
Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE
MASS
71
AREA
1465
HEIGHT
603
01-Aug-2023
21:03



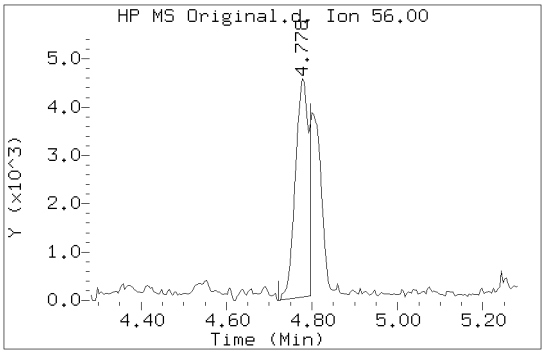
AFTER
MASS
71
AREA
1465
HEIGHT
603
01-Aug-2023
21:03



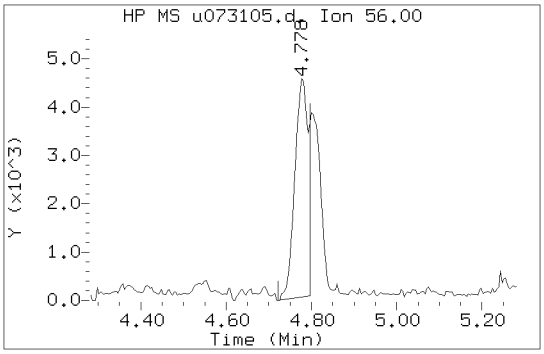
Cyclohexane (110-82-7)

Reason Code:

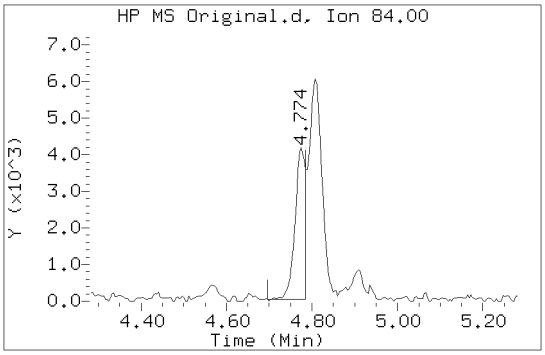
BEFORE
MASS
56
AREA
10228
HEIGHT
4523
01-Aug-2023
21:03



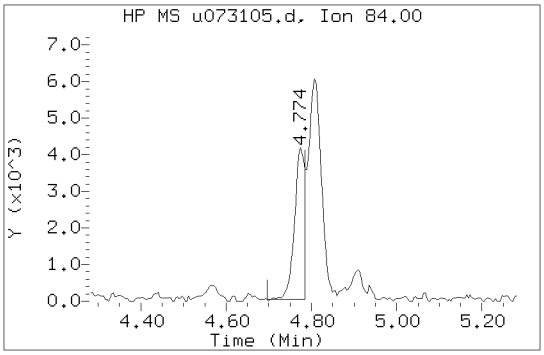
AFTER
MASS
56
AREA
10228
HEIGHT
4523
01-Aug-2023
21:03



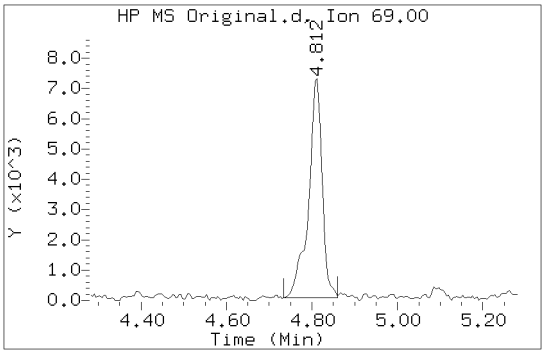
BEFORE
MASS
84
AREA
7125
HEIGHT
4139
01-Aug-2023
21:03



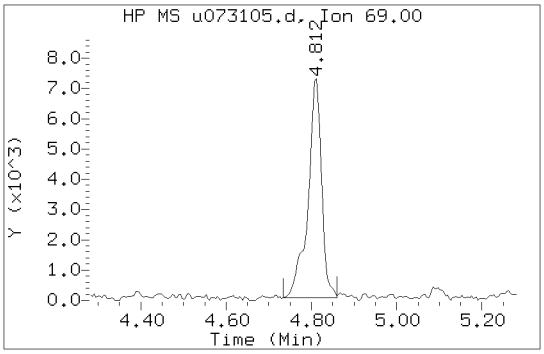
AFTER
MASS
84
AREA
7125
HEIGHT
4139
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
16107
HEIGHT
7234
01-Aug-2023
21:03



AFTER
MASS
69
AREA
16107
HEIGHT
7234
01-Aug-2023
21:03

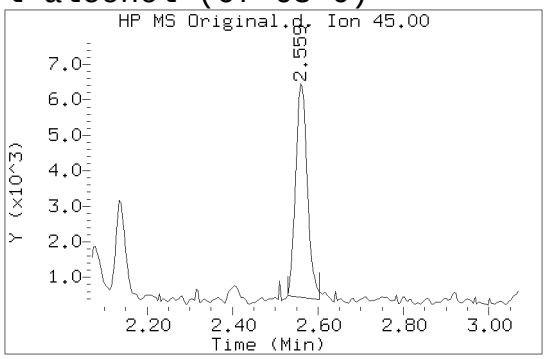


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

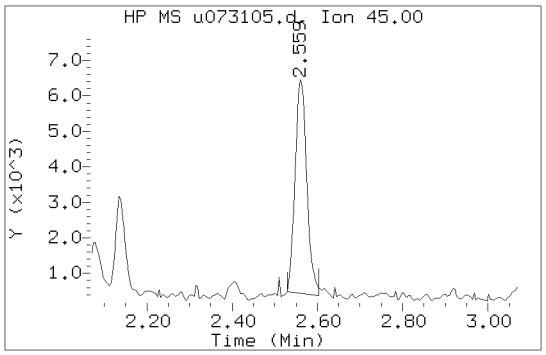
Isopropyl alcohol (67-63-0)

Reason Code:

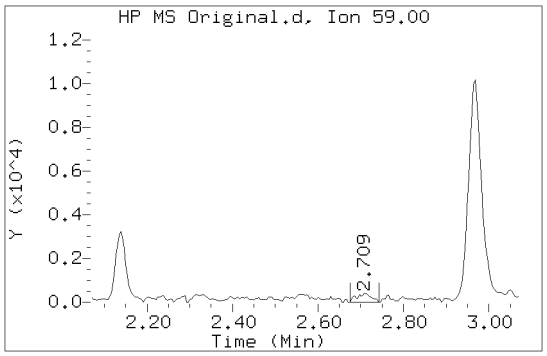
BEFORE
MASS
45
AREA
11717
HEIGHT
6022
01-Aug-2023
21:03



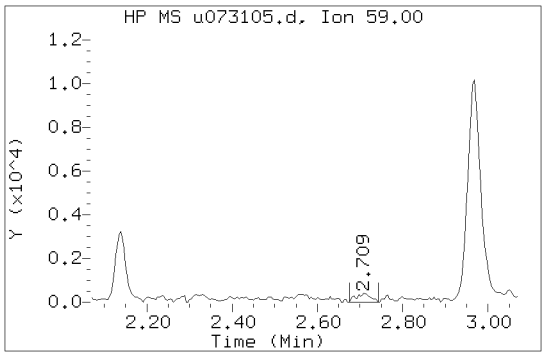
AFTER
MASS
45
AREA
11717
HEIGHT
6022
01-Aug-2023
21:03



BEFORE
MASS
59
AREA
965
HEIGHT
397
01-Aug-2023
21:03



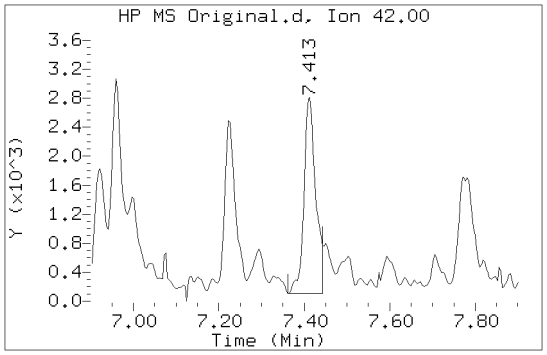
AFTER
MASS
59
AREA
965
HEIGHT
397
01-Aug-2023
21:03



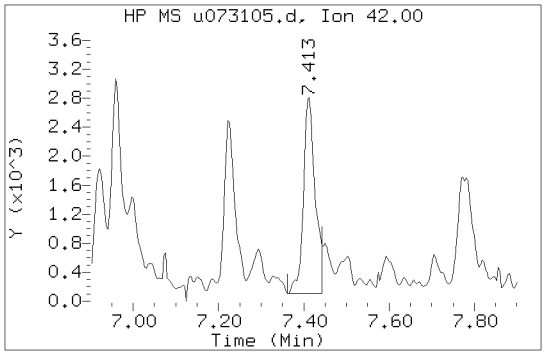
Amyl alcohol (71-41-0)

Reason Code:

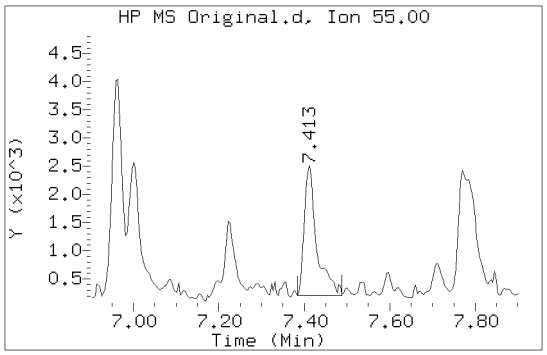
BEFORE
MASS
42
AREA
5299
HEIGHT
2702
01-Aug-2023
21:03



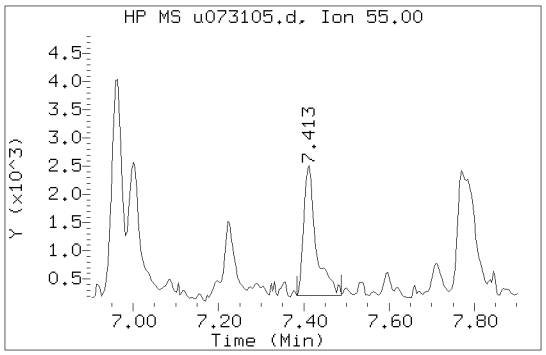
AFTER
MASS
42
AREA
5299
HEIGHT
2702
01-Aug-2023
21:03



BEFORE
MASS
55
AREA
4770
HEIGHT
2303
01-Aug-2023
21:03



AFTER
MASS
55
AREA
4770
HEIGHT
2303
01-Aug-2023
21:03

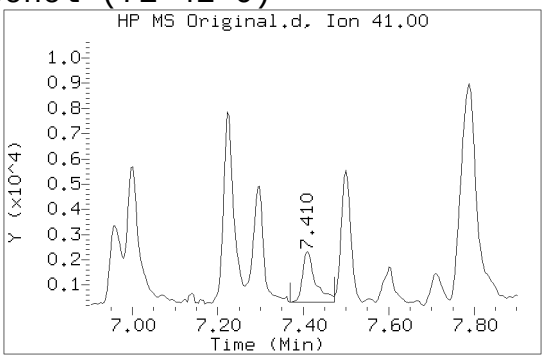


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LabSampID : VSTD002

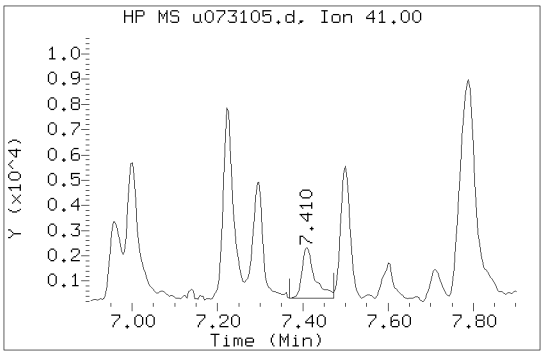
Amyl alcohol (71-41-0)

Reason Code:

BEFORE
MASS
41
AREA
4366
HEIGHT
2016
01-Aug-2023
21:03



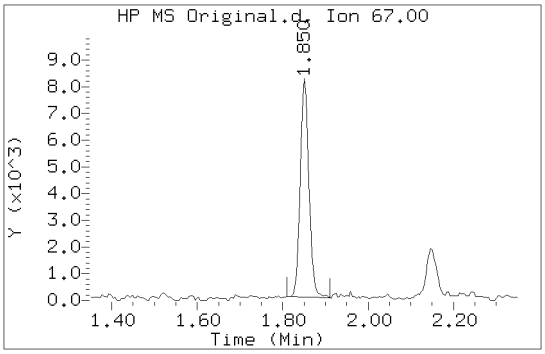
AFTER
MASS
41
AREA
4366
HEIGHT
2016
01-Aug-2023
21:03



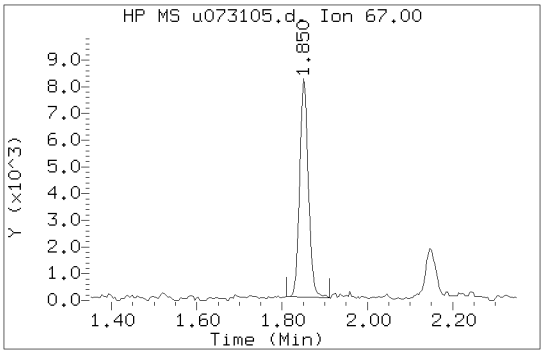
Dichlorofluoromethane (75-43-4)

Reason Code:

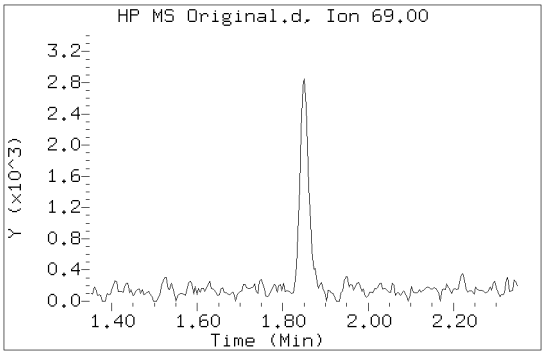
BEFORE
MASS
67
AREA
11833
HEIGHT
8182
01-Aug-2023
21:03



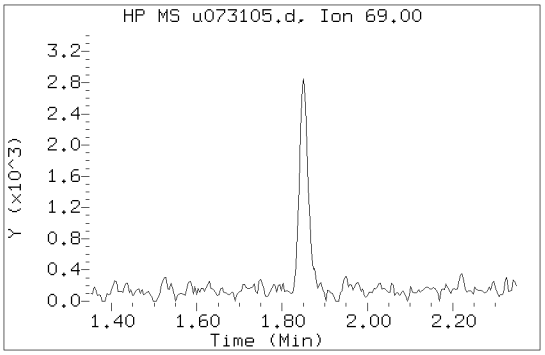
AFTER
MASS
67
AREA
11833
HEIGHT
8182
01-Aug-2023
21:03



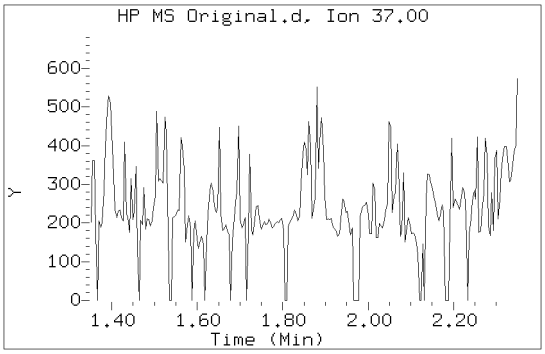
BEFORE
MASS
69
AREA
0
HEIGHT
0
01-Aug-2023
21:03



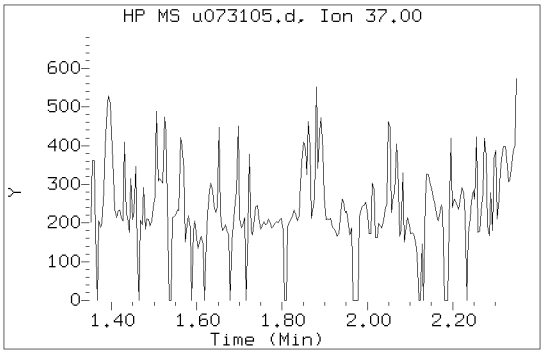
AFTER
MASS
69
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
37
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
37
AREA
0
HEIGHT
0
01-Aug-2023
21:03

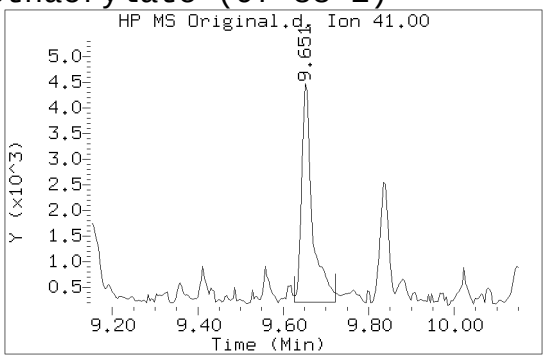


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

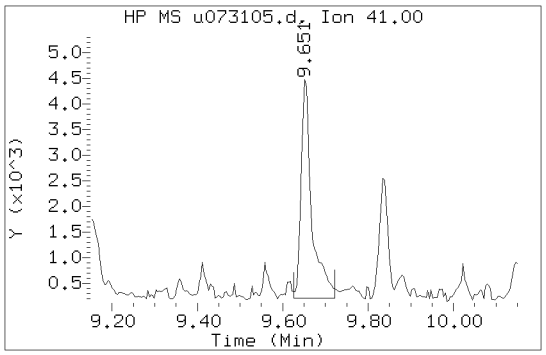
Butyl methacrylate (97-88-1)

Reason Code:

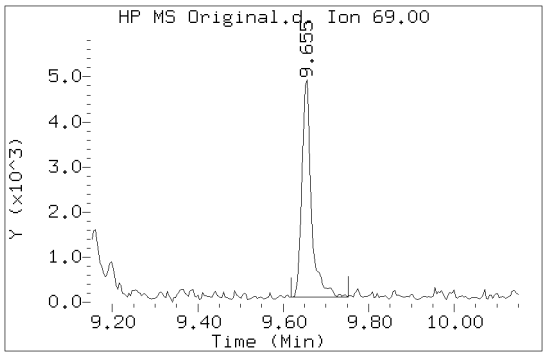
BEFORE
MASS
41
AREA
7671
HEIGHT
4267
01-Aug-2023
21:03



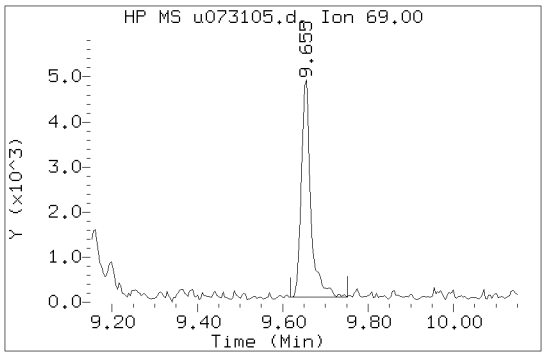
AFTER
MASS
41
AREA
7671
HEIGHT
4267
01-Aug-2023
21:03



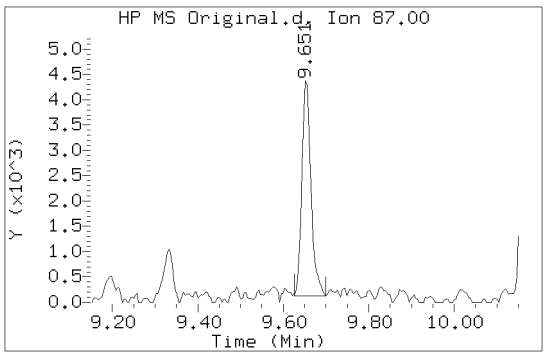
BEFORE
MASS
69
AREA
7636
HEIGHT
4818
01-Aug-2023
21:03



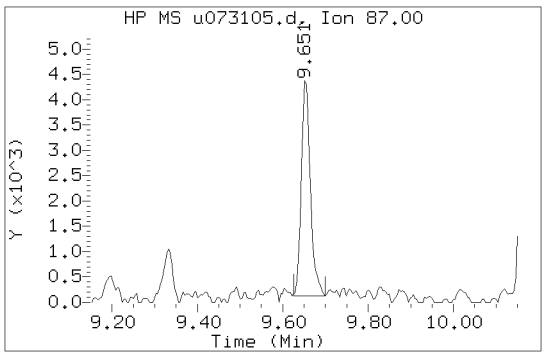
AFTER
MASS
69
AREA
7636
HEIGHT
4818
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
6464
HEIGHT
4246
01-Aug-2023
21:03



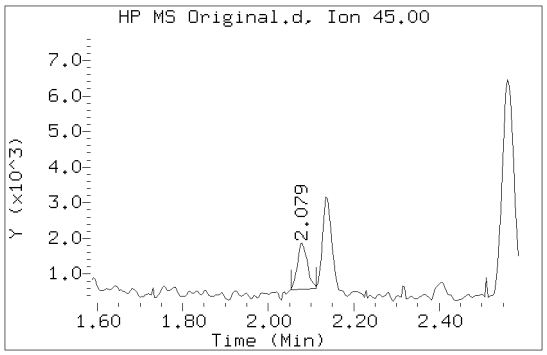
AFTER
MASS
87
AREA
6464
HEIGHT
4246
01-Aug-2023
21:03



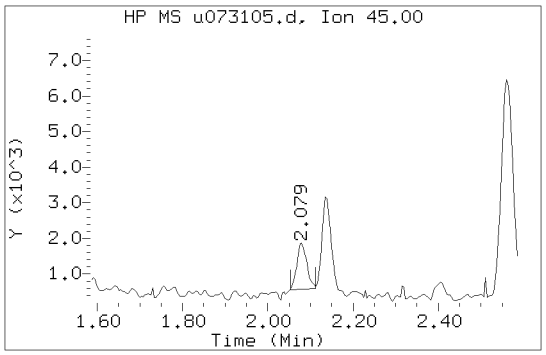
Ethanol (64-17-5)

Reason Code:

BEFORE
MASS
45
AREA
2145
HEIGHT
1308
01-Aug-2023
21:03



AFTER
MASS
45
AREA
2145
HEIGHT
1308
01-Aug-2023
21:03

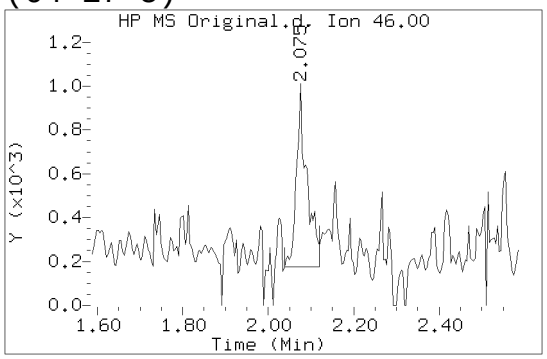


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073105.d
Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

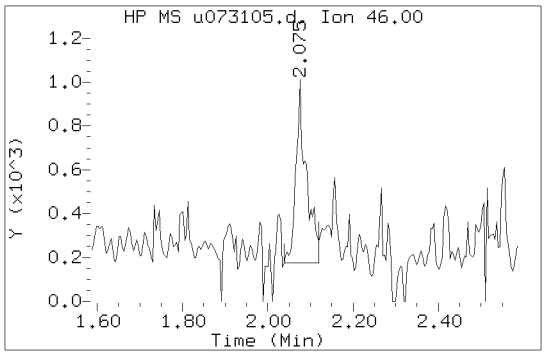
Ethanol (64-17-5)

Reason Code:

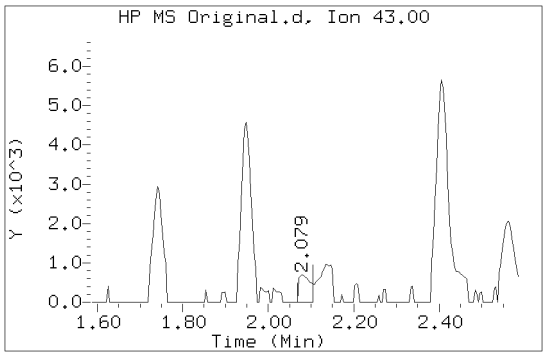
BEFORE
MASS
46
AREA
1416
HEIGHT
835
01-Aug-2023
21:03



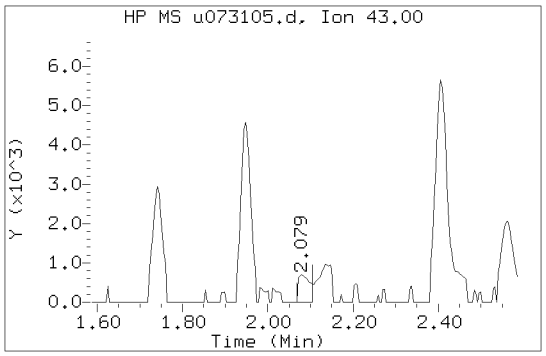
AFTER
MASS
46
AREA
1416
HEIGHT
835
01-Aug-2023
21:03



BEFORE
MASS
43
AREA
1335
HEIGHT
696
01-Aug-2023
21:03



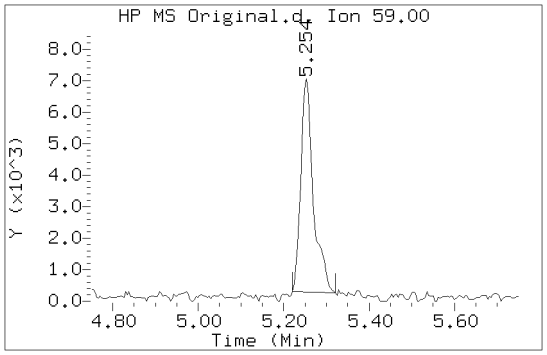
AFTER
MASS
43
AREA
1335
HEIGHT
696
01-Aug-2023
21:03



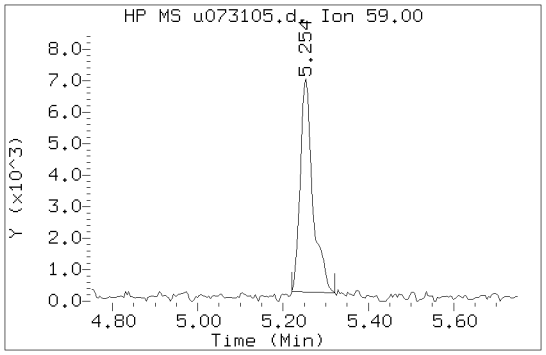
tert-Butyl formate (762-75-4)

Reason Code:

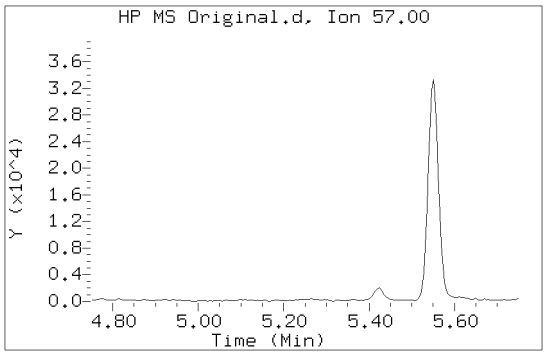
BEFORE
MASS
59
AREA
14015
HEIGHT
6762
01-Aug-2023
21:03



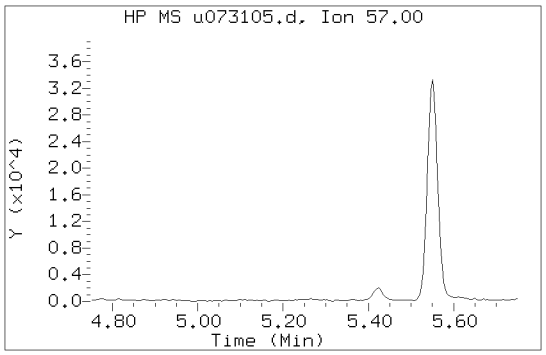
AFTER
MASS
59
AREA
14015
HEIGHT
6762
01-Aug-2023
21:03



BEFORE
MASS
57
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
57
AREA
0
HEIGHT
0
01-Aug-2023
21:03



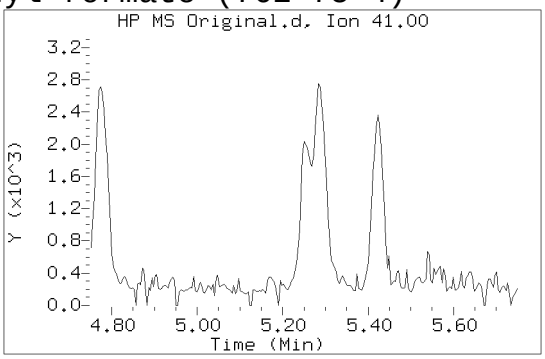
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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

tert-Butyl formate (762-75-4)

Reason Code:

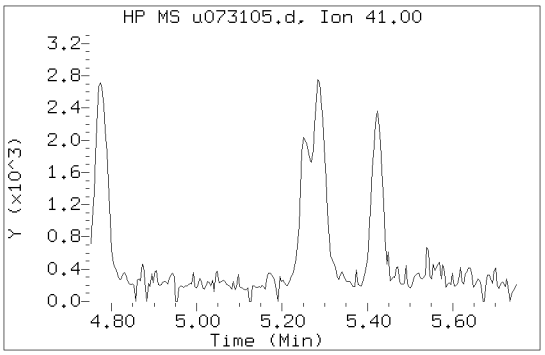
BEFORE

MASS
41
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER

MASS
41
AREA
0
HEIGHT
0
01-Aug-2023
21:03

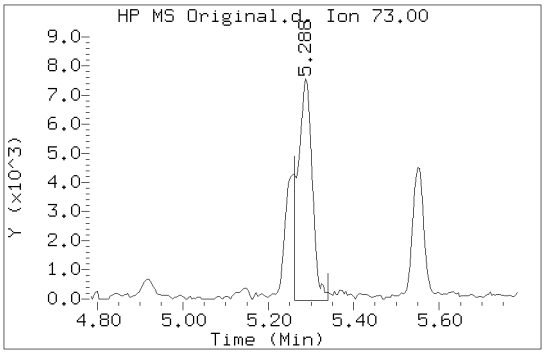


tert-Amyl methyl ether (974-05-08)

Reason Code:

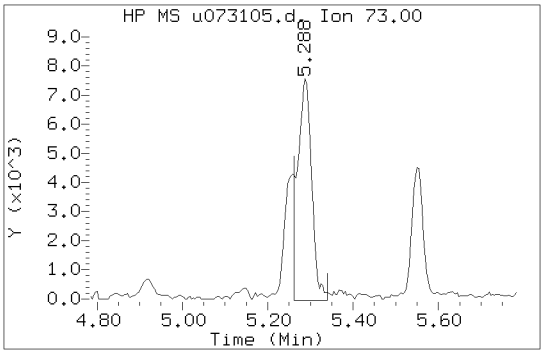
BEFORE

MASS
73
AREA
17751
HEIGHT
7610
01-Aug-2023
21:03



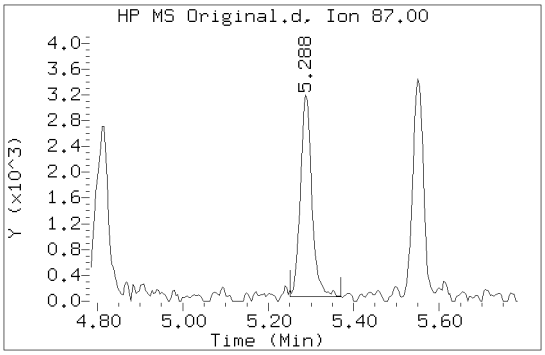
AFTER

MASS
73
AREA
17751
HEIGHT
7610
01-Aug-2023
21:03



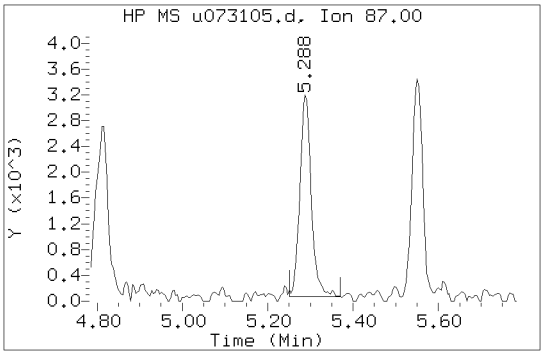
BEFORE

MASS
87
AREA
5991
HEIGHT
3129
01-Aug-2023
21:03



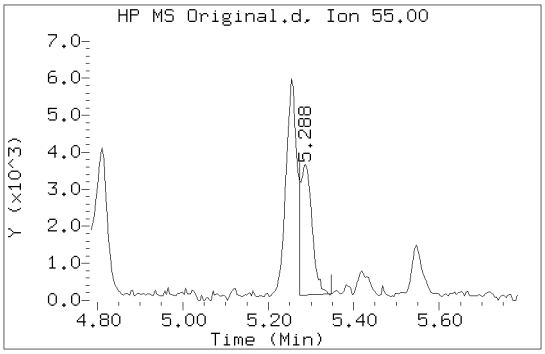
AFTER

MASS
87
AREA
5991
HEIGHT
3129
01-Aug-2023
21:03



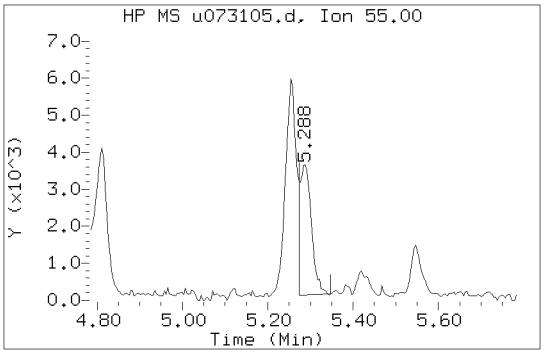
BEFORE

MASS
55
AREA
7022
HEIGHT
3527
01-Aug-2023
21:03



AFTER

MASS
55
AREA
7022
HEIGHT
3527
01-Aug-2023
21:03

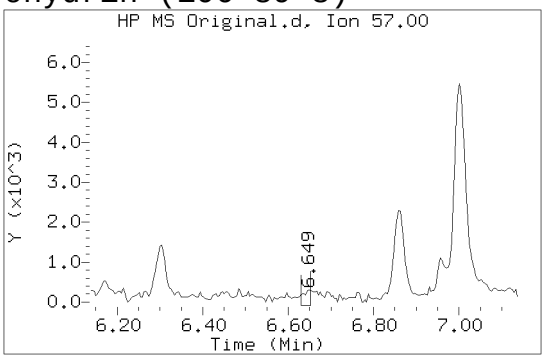


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

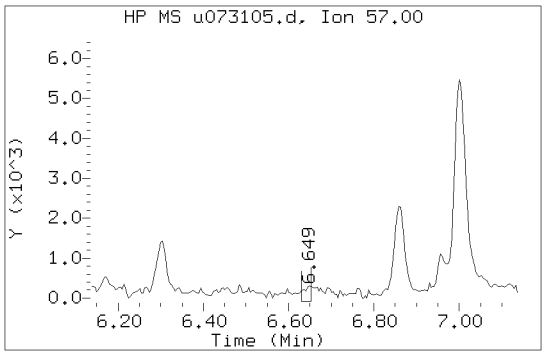
Epichlorohydrin (106-89-8)

Reason Code:

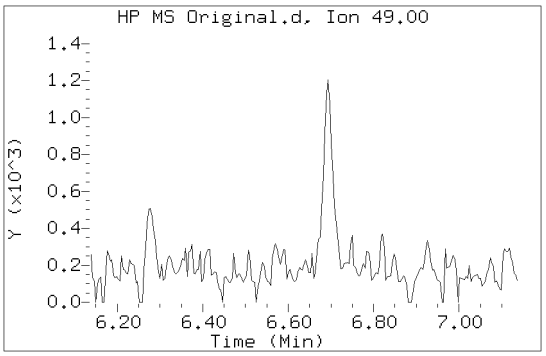
BEFORE
MASS
57
AREA
503
HEIGHT
381
01-Aug-2023
21:03



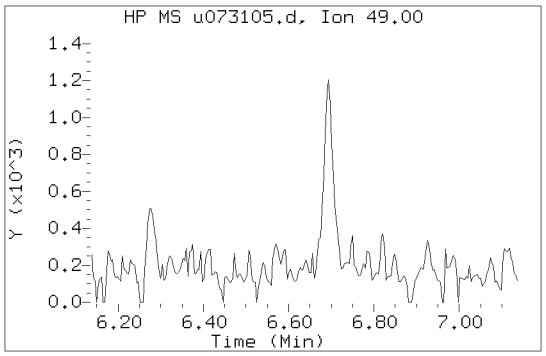
AFTER
MASS
57
AREA
503
HEIGHT
381
01-Aug-2023
21:03



BEFORE
MASS
49
AREA
0
HEIGHT
0
01-Aug-2023
21:03



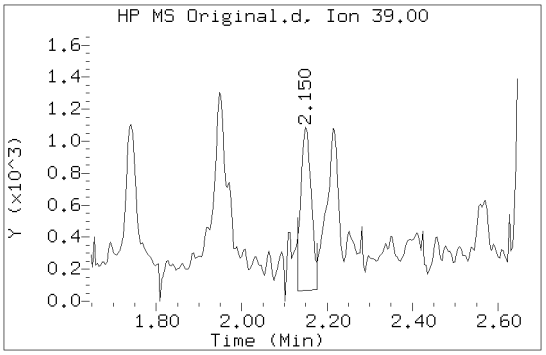
AFTER
MASS
49
AREA
0
HEIGHT
0
01-Aug-2023
21:03



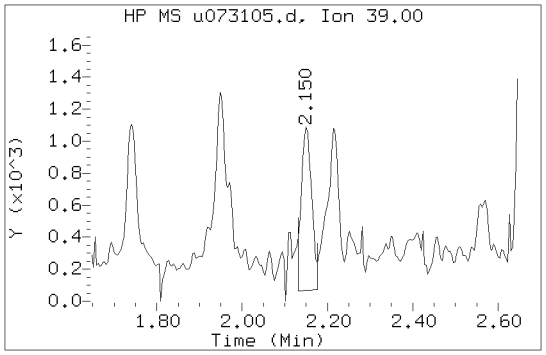
Isoprene (78-79-5)

Reason Code:

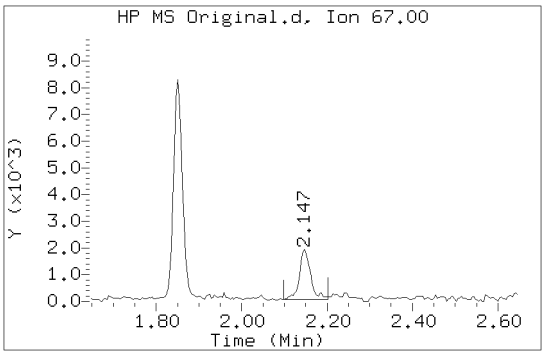
BEFORE
MASS
39
AREA
1788
HEIGHT
1023
01-Aug-2023
21:03



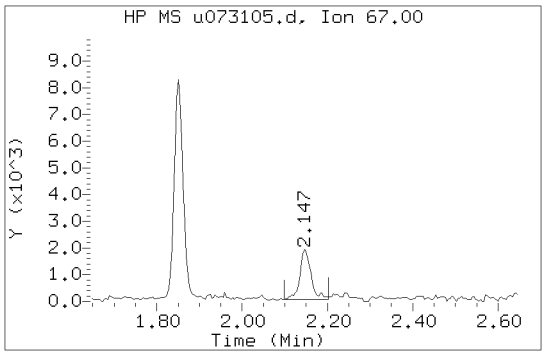
AFTER
MASS
39
AREA
1788
HEIGHT
1023
01-Aug-2023
21:03



BEFORE
MASS
67
AREA
3419
HEIGHT
1866
01-Aug-2023
21:03



AFTER
MASS
67
AREA
3419
HEIGHT
1866
01-Aug-2023
21:03

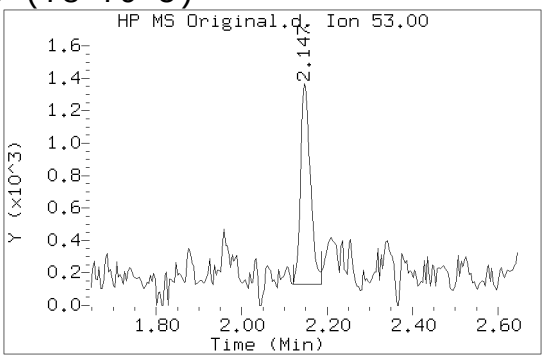


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

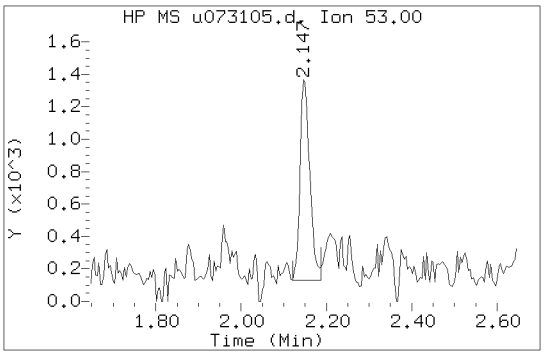
Isoprene (78-79-5)

Reason Code:

BEFORE
MASS
53
AREA
2020
HEIGHT
1238
01-Aug-2023
21:03



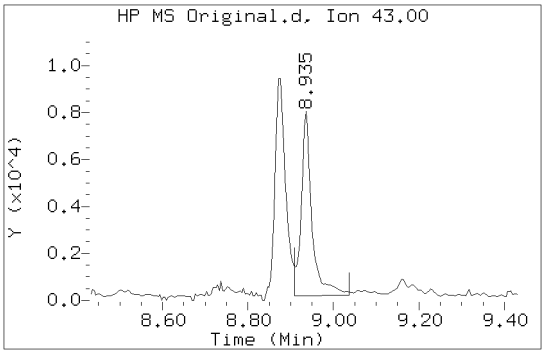
AFTER
MASS
53
AREA
2020
HEIGHT
1238
01-Aug-2023
21:03



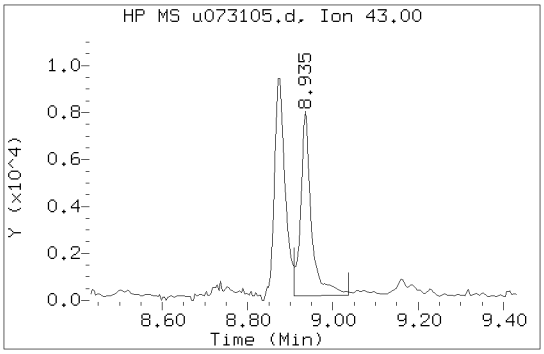
n-Amyl acetate (628-63-7)

Reason Code:

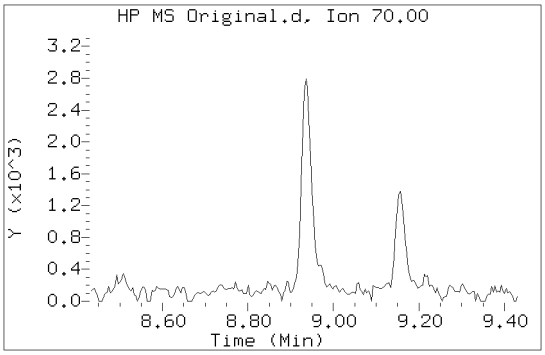
BEFORE
MASS
43
AREA
13983
HEIGHT
7855
01-Aug-2023
21:03



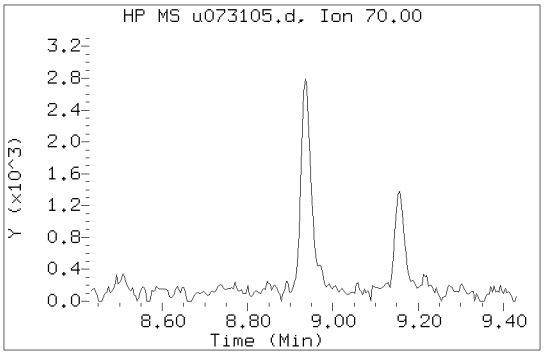
AFTER
MASS
43
AREA
13983
HEIGHT
7855
01-Aug-2023
21:03



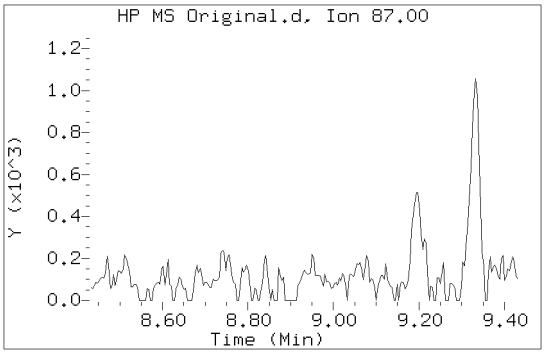
BEFORE
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



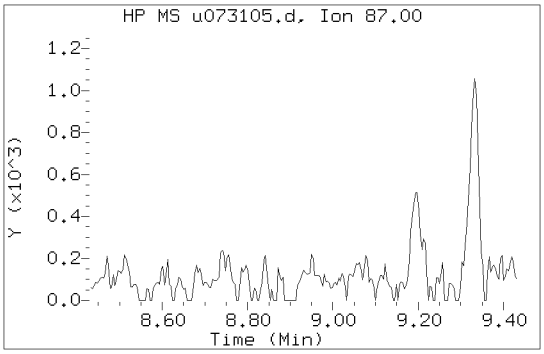
AFTER
MASS
70
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
87
AREA
0
HEIGHT
0
01-Aug-2023
21:03

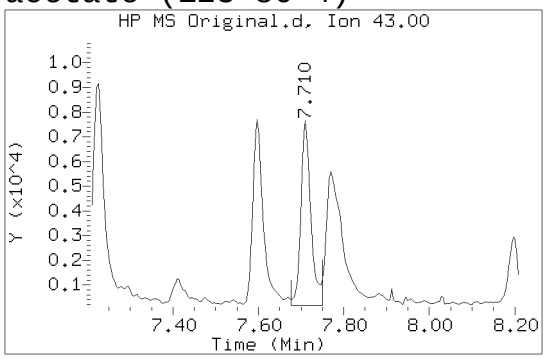


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InstruID : VOA9.i
LabSampID : VSTD002

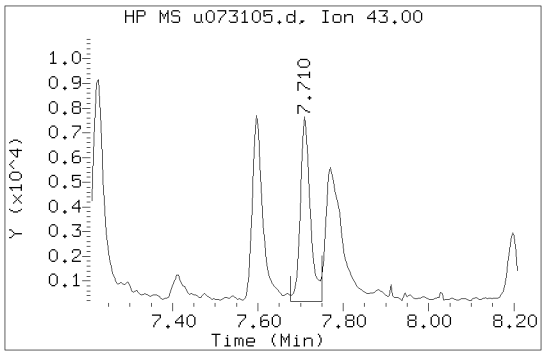
n-Butyl acetate (123-86-4)

Reason Code:

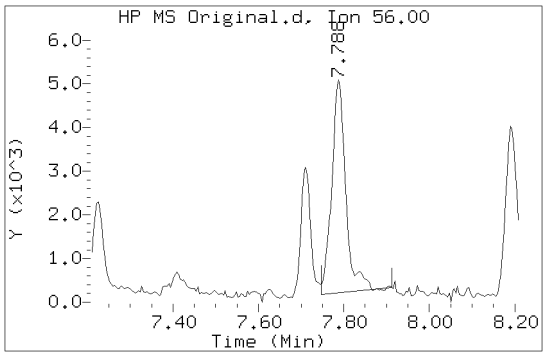
BEFORE
MASS
43
AREA
12613
HEIGHT
7463
01-Aug-2023
21:03



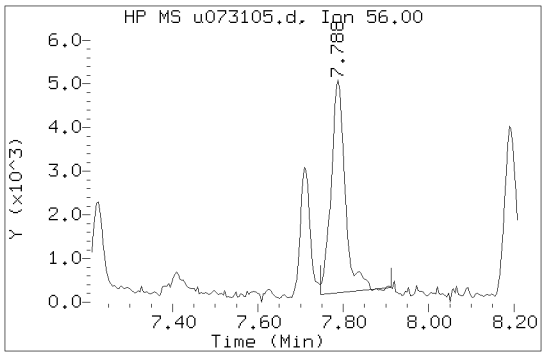
AFTER
MASS
43
AREA
12613
HEIGHT
7463
01-Aug-2023
21:03



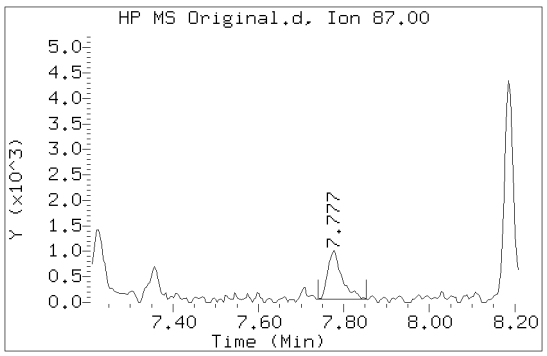
BEFORE
MASS
56
AREA
11094
HEIGHT
4877
01-Aug-2023
21:03



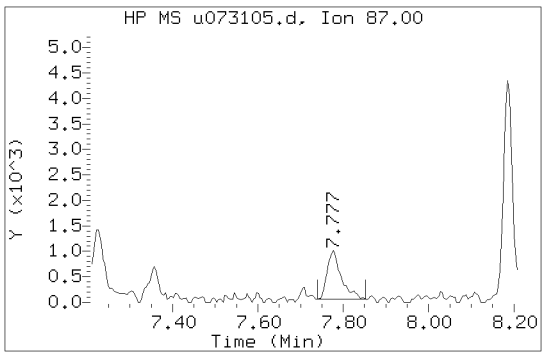
AFTER
MASS
56
AREA
11094
HEIGHT
4877
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
2164
HEIGHT
955
01-Aug-2023
21:03



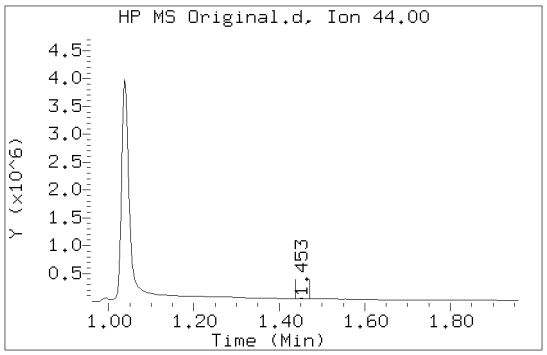
AFTER
MASS
87
AREA
2164
HEIGHT
955
01-Aug-2023
21:03



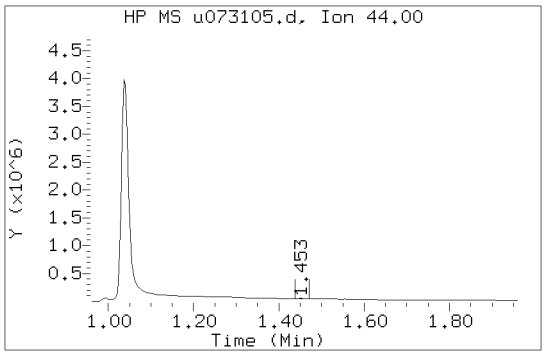
Acetaldehyde (75-07-0)

Reason Code:

BEFORE
MASS
44
AREA
5632
HEIGHT
5441
01-Aug-2023
21:03



AFTER
MASS
44
AREA
5632
HEIGHT
5441
01-Aug-2023
21:03

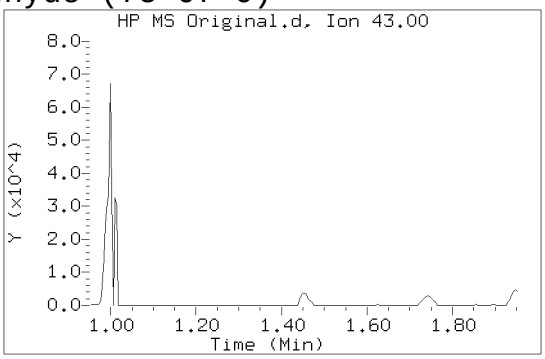


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

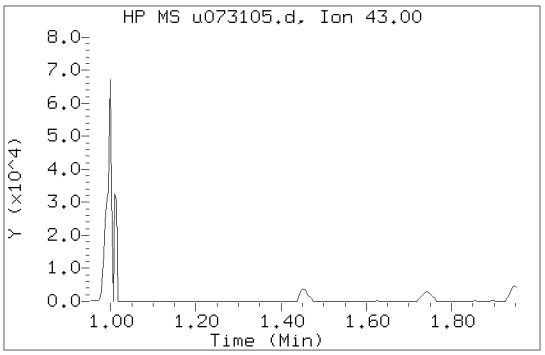
Acetaldehyde (75-07-0)

Reason Code:

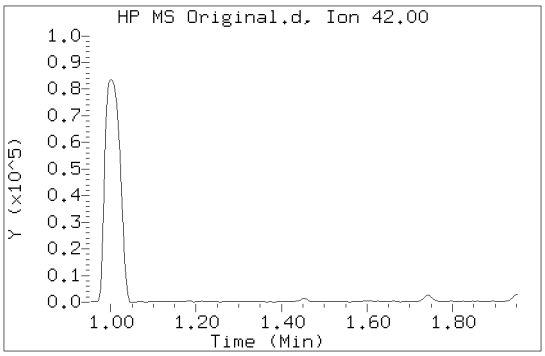
BEFORE
MASS
43
AREA
0
HEIGHT
0
01-Aug-2023
21:03



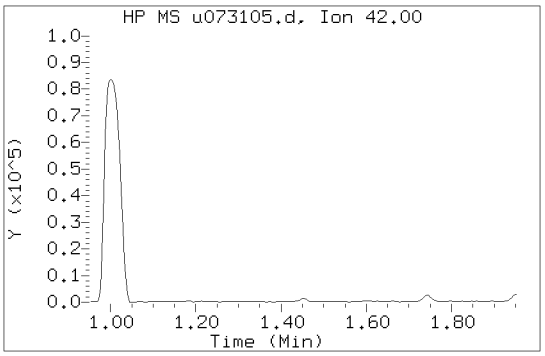
AFTER
MASS
43
AREA
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HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
42
AREA
0
HEIGHT
0
01-Aug-2023
21:03



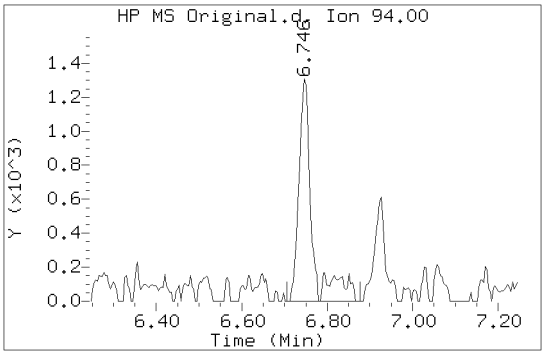
AFTER
MASS
42
AREA
0
HEIGHT
0
01-Aug-2023
21:03



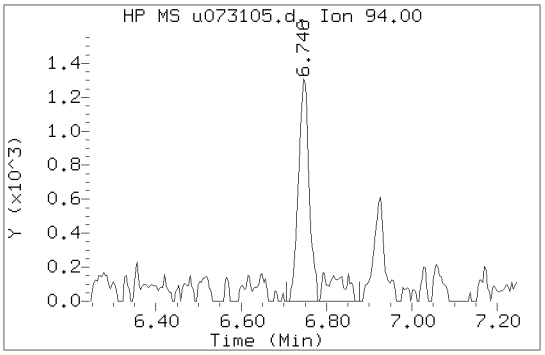
Dimethyl Disulfide (624-92-0)

Reason Code:

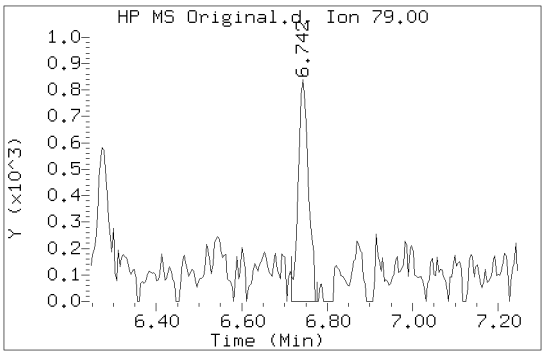
BEFORE
MASS
94
AREA
2883
HEIGHT
1308
01-Aug-2023
21:03



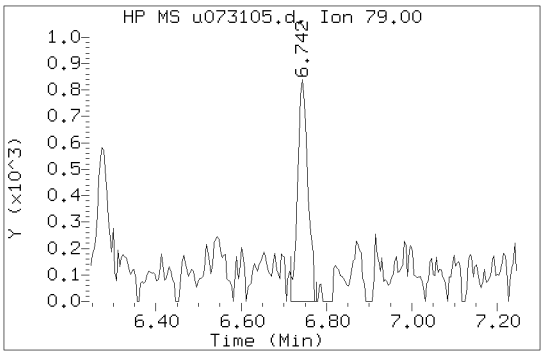
AFTER
MASS
94
AREA
2883
HEIGHT
1308
01-Aug-2023
21:03



BEFORE
MASS
79
AREA
1422
HEIGHT
839
01-Aug-2023
21:03



AFTER
MASS
79
AREA
1422
HEIGHT
839
01-Aug-2023
21:03

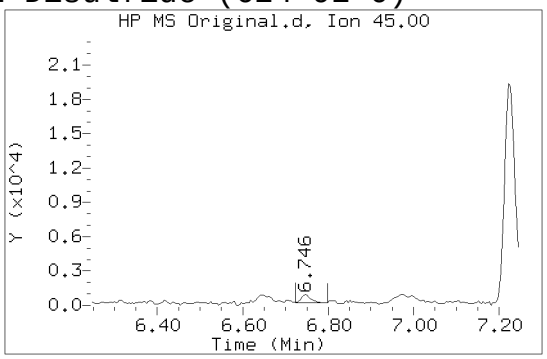


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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

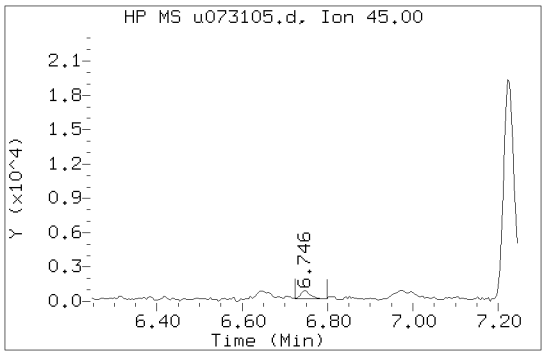
Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE
MASS
45
AREA
1145
HEIGHT
759
01-Aug-2023
21:03



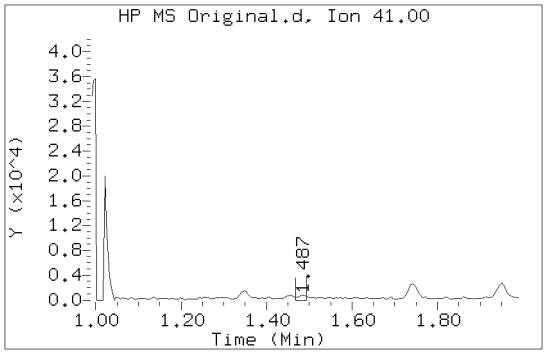
AFTER
MASS
45
AREA
1145
HEIGHT
759
01-Aug-2023
21:03



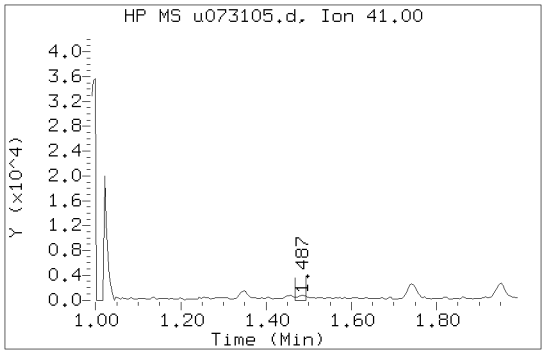
Isobutylene (115-11-7)

Reason Code:

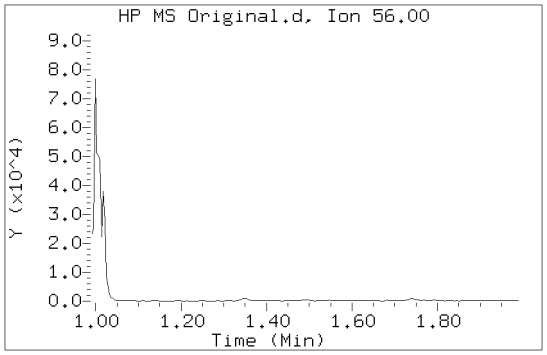
BEFORE
MASS
41
AREA
1159
HEIGHT
816
01-Aug-2023
21:03



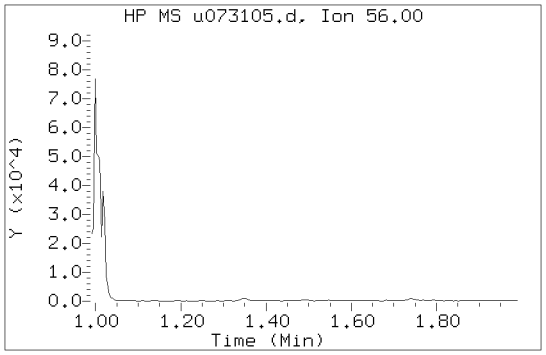
AFTER
MASS
41
AREA
1159
HEIGHT
816
01-Aug-2023
21:03



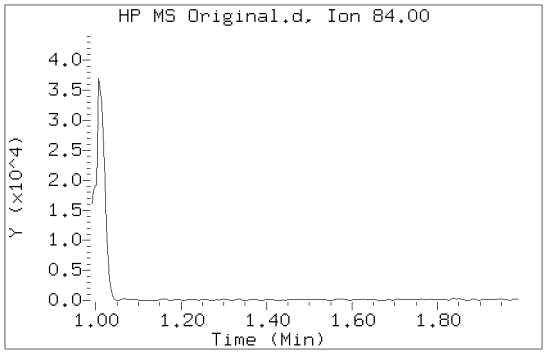
BEFORE
MASS
56
AREA
0
HEIGHT
0
01-Aug-2023
21:03



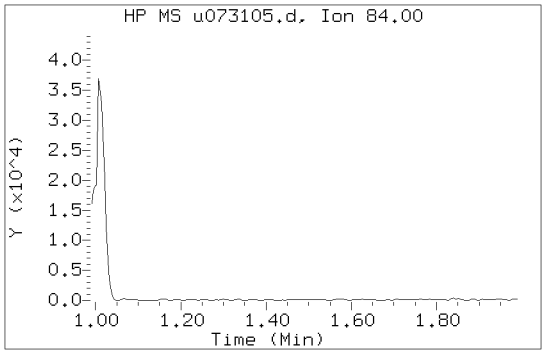
AFTER
MASS
56
AREA
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HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
84
AREA
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HEIGHT
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01-Aug-2023
21:03



AFTER
MASS
84
AREA
0
HEIGHT
0
01-Aug-2023
21:03

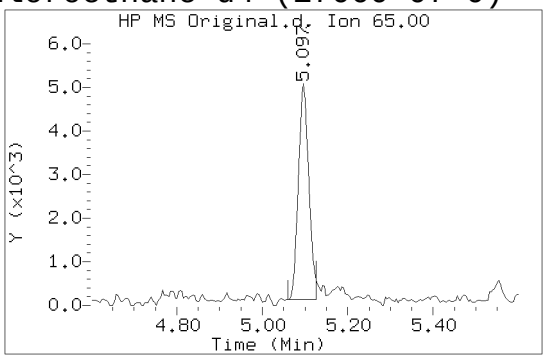


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InstruID : VOA9.i
LabSampID : VSTD002

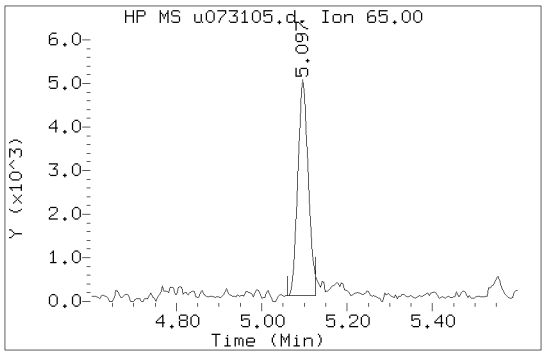
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

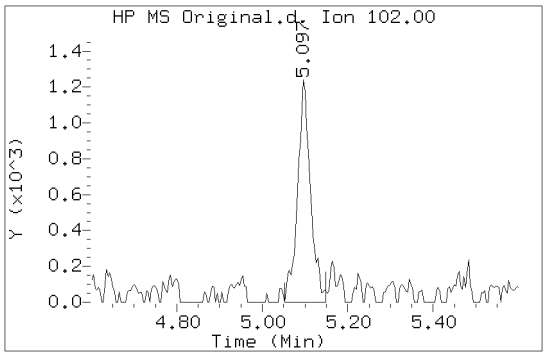
BEFORE
MASS
65
AREA
8650
HEIGHT
4958
01-Aug-2023
21:03



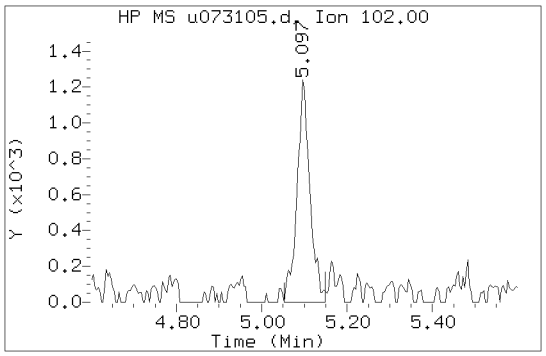
AFTER
MASS
65
AREA
8650
HEIGHT
4958
01-Aug-2023
21:03



BEFORE
MASS
102
AREA
2654
HEIGHT
1240
01-Aug-2023
21:03



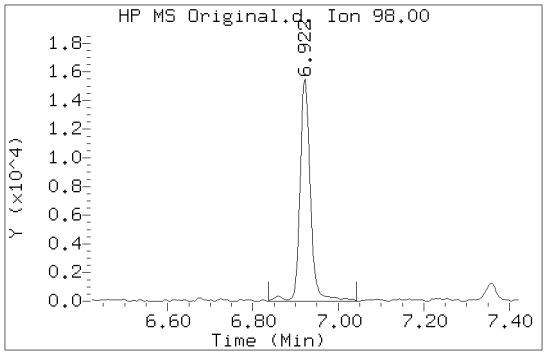
AFTER
MASS
102
AREA
2654
HEIGHT
1240
01-Aug-2023
21:03



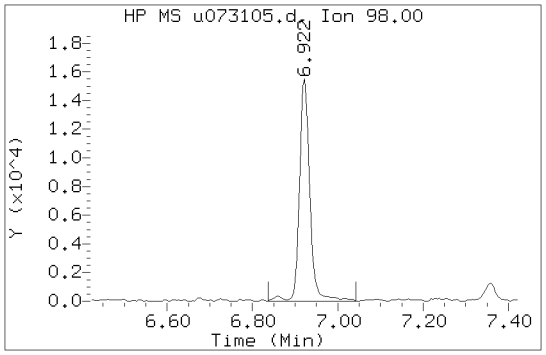
Toluene-d8 (2037-26-5)

Reason Code:

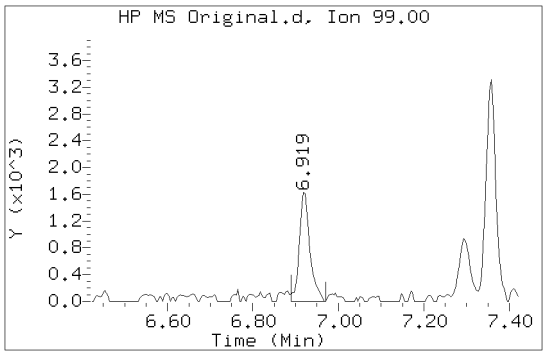
BEFORE
MASS
98
AREA
27056
HEIGHT
15514
01-Aug-2023
21:03



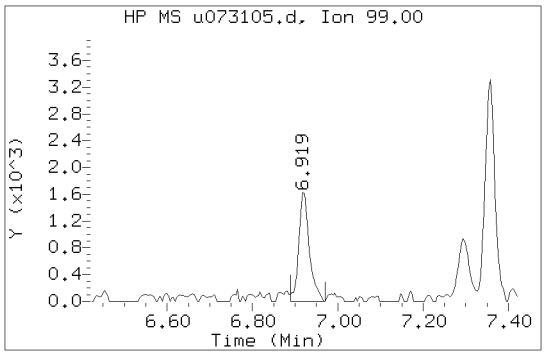
AFTER
MASS
98
AREA
27056
HEIGHT
15514
01-Aug-2023
21:03



BEFORE
MASS
99
AREA
2902
HEIGHT
1630
01-Aug-2023
21:03



AFTER
MASS
99
AREA
2902
HEIGHT
1630
01-Aug-2023
21:03



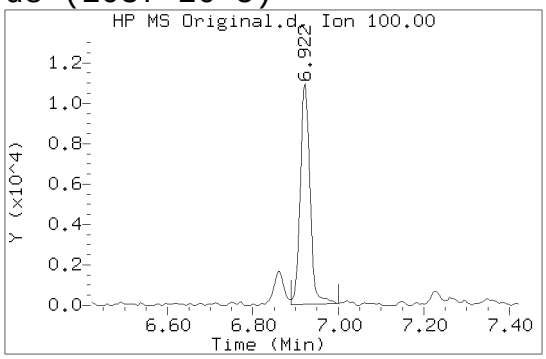
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Inj Date : 31-JUL-2023 12:59
InstruID : VOA9.i
LabSampID : VSTD002

Toluene-d8 (2037-26-5)

Reason Code:

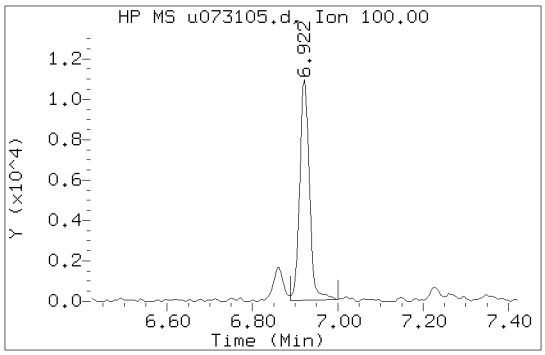
BEFORE

MASS
100
AREA
17639
HEIGHT
10907
01-Aug-2023
21:03



AFTER

MASS
100
AREA
17639
HEIGHT
10907
01-Aug-2023
21:03



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073106.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073106.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 31-JUL-2023 13:22
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 12:59 Cal File: U073105.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.811	(1.000)	477296	50.0000	
2 Dichlorodifluoromethane	85	1.160	1.160	(0.241)	23279	5.00000	6.22(M)
3 Chloromethane	50	1.295	1.295	(0.269)	32235	5.00000	5.44
5 Vinyl Chloride	62	1.374	1.374	(0.286)	24754	5.00000	5.26
6 Bromomethane	94	1.617	1.617	(0.336)	17093	5.00000	5.32
7 Chloroethane	64	1.696	1.696	(0.353)	15470	5.00000	5.22
8 Trichlorofluoromethane	101	1.891	1.891	(0.393)	30893	5.00000	5.32
9 Acrolein	56	1.745	1.745	(0.363)	2540	10.0000	8.29(M)
10 Acetone	43	2.408	2.408	(0.501)	23014	10.0000	8.49
11 1,1-Dichloroethene	96	2.326	2.326	(0.483)	15997	5.00000	5.08
15 Iodomethane	142	2.461	2.461	(0.512)	21659	10.0000	10.71
16 Acrylonitrile	53	3.064	3.064	(0.637)	15280	10.0000	10.18
17 Methylene Chloride	84	2.791	2.791	(0.580)	23329	5.00000	5.93
18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	47514	5.00000	4.88
19 Carbon Disulfide	76	2.513	2.513	(0.522)	88861	10.0000	9.70
20 trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	17352	5.00000	4.92
21 Vinyl Acetate	43	3.608	3.608	(0.750)	96584	10.0000	9.57
22 1,1-Dichloroethane	63	3.511	3.511	(0.730)	33466	5.00000	5.19
24 2-Butanone	43	4.268	4.268	(0.887)	18859	10.0000	10.05
26 2,2-Dichloropropane	77	4.182	4.182	(0.869)	22372	5.00000	5.03

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	20019	5.00000	5.08
28 Chloroform	83	4.568	4.568 (0.949)	37942	5.00000	5.06

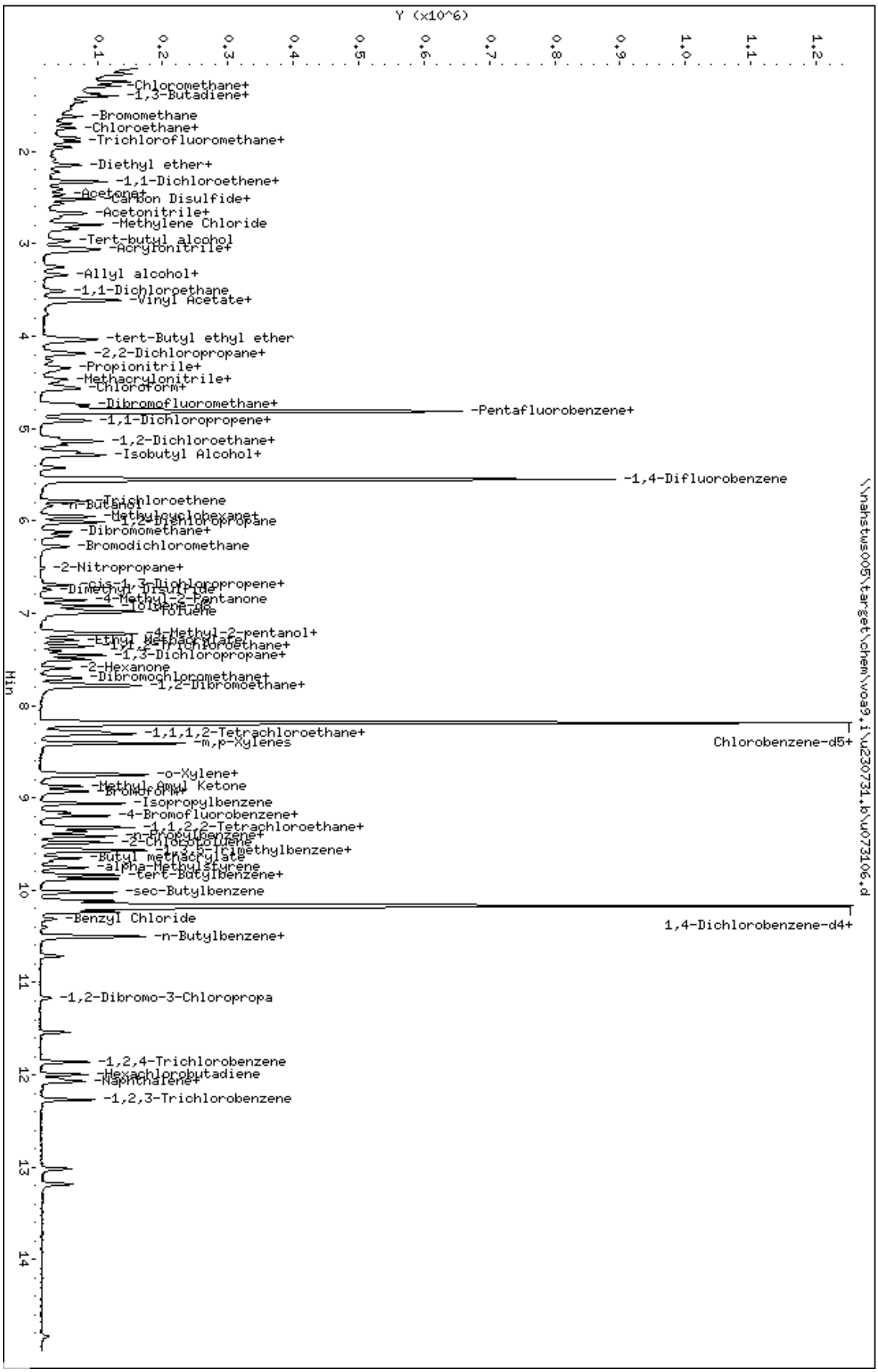
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.463	4.463	(0.928)	11894	5.00000	5.10
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	19210	5.00000	4.13
	31 1,1,1-Trichloroethane	97	4.736	4.736	(0.984)	28453	5.00000	4.87
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	25772	5.00000	5.06
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	31448	5.00000	5.32
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	21374	5.00000	4.68
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	21416	5.00000	3.95(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	685400	50.0000	
	37 Benzene	78	5.137	5.137	(0.926)	87635	5.00000	5.23
	38 Trichloroethene	130	5.786	5.786	(1.043)	23774	5.00000	5.02
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	26251	5.00000	4.90
	41 2-Chloroethylvinyl ether	63	6.569	6.569	(1.184)	737	10.0000	8.48(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.083)	22011	5.00000	4.90
	44 Dibromomethane	93	6.120	6.120	(1.103)	15018	5.00000	5.21
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	43752	10.0000	9.10
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	24292	5.00000	5.60
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	645495	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	68368	5.00000	4.55(M)
	50 Toluene	91	6.982	6.982	(0.853)	92158	5.00000	5.25
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.297)	21941	5.00000	4.25(M)
	52 2-Hexanone	43	7.597	7.597	(0.928)	30314	10.0000	9.53
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	18667	5.00000	4.96
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	39536	5.00000	5.12
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	20550	5.00000	4.45
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	22560	5.00000	5.28
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	22275	5.00000	4.92
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	16825	5.00000	4.70(M)
	59 Chlorobenzene	112	8.208	8.208	(1.003)	63872	5.00000	5.13
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	21993	5.00000	4.85
	61 Ethylbenzene	106	8.305	8.305	(1.015)	27211	5.00000	4.83
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	61778	10.0000	9.34
	63 o-Xylene	106	8.747	8.747	(1.069)	30639	5.00000	4.73
	64 Styrene	104	8.762	8.762	(1.071)	43910	5.00000	4.35(M)
	66 Bromoform	173	8.920	8.920	(1.090)	14896	5.00000	4.62
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	75107	5.00000	4.79
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	33006	5.00000	5.12
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	29702	5.00000	3.82
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	334416	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	27992	5.00000	4.99
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	77798	5.00000	5.63
	74 Bromobenzene	156	9.317	9.317	(0.916)	27954	5.00000	5.05
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	55269	5.00000	4.72
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	58195	5.00000	4.93
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	67252	5.00000	5.10
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	55162	5.00000	4.98
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	61242	5.00000	5.17
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	69225	5.00000	5.61(M)
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	56898	5.00000	5.54
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	47457	5.00000	5.13
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	53111	5.00000	5.19
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	44805	5.00000	6.17
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	48335	5.00000	5.10

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	4162	5.00000	4.48
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	25884	5.00000	4.44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	13619	5.00000	6.16(M)
	92 Naphthalene	128	12.069	12.069	(1.186)	51655	5.00000	4.84
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	26348	5.00000	4.42
M	94 1,2-Dichloroethylene (total)	96				37371	10.0000	
M	95 Xylenes (total)	106				92417	15.0000	
	135 1,4-Dioxane	88	6.176	6.176	(1.284)	6838	100.000	99.92(M)
	141 Cyclohexane	56	4.778	4.778	(0.993)	26286	5.00000	4.89(M)
	138 Freon TF	101	2.330	2.330	(0.484)	16029	5.00000	6.05(M)
	140 1,3-Butadiene	54	1.396	1.396	(0.290)	19067	5.00000	5.01
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	42152	5.00000	4.22
	146 Methyl Acetate	43	2.712	2.712	(0.564)	16899	5.00000	4.93
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.617)	44536	100.000	108.21
	149 Isopropyl Alcohol	45	2.562	2.562	(0.533)	24018	100.000	91.05(T)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\voa9,i\u230731,b\u073106,d
Date : 31-JUL-2023 13:22
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
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Column phase: DB624

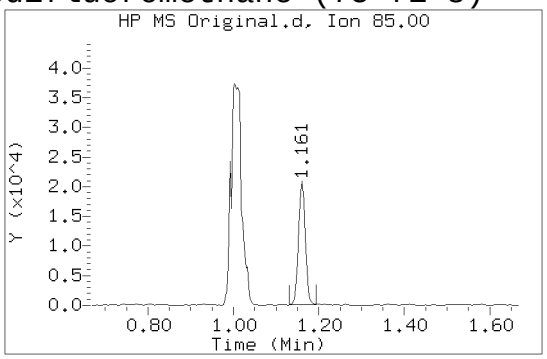
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073106.d
Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

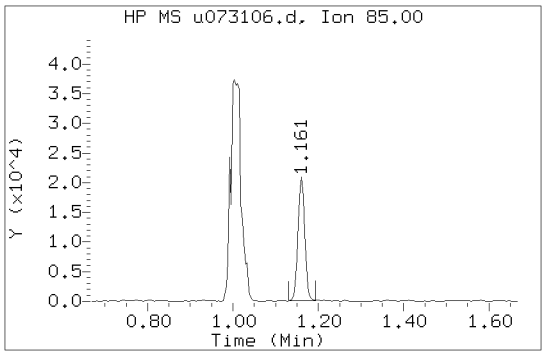
Dichlorodifluoromethane (75-71-8)

Reason Code:

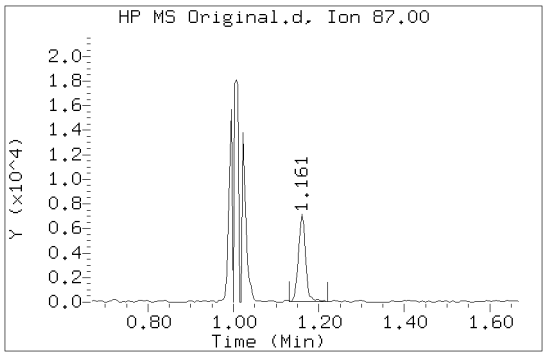
BEFORE
MASS
85
AREA
23279
HEIGHT
20847
01-Aug-2023
21:03



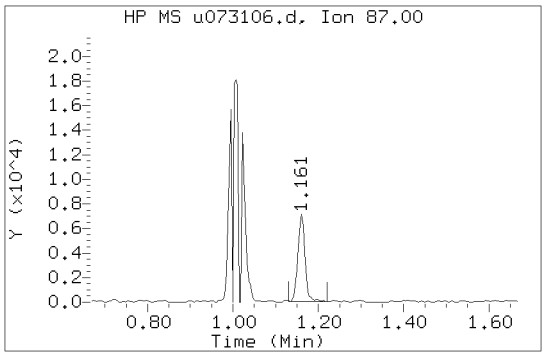
AFTER
MASS
85
AREA
23279
HEIGHT
20847
01-Aug-2023
21:03



BEFORE
MASS
87
AREA
8255
HEIGHT
7106
01-Aug-2023
21:03



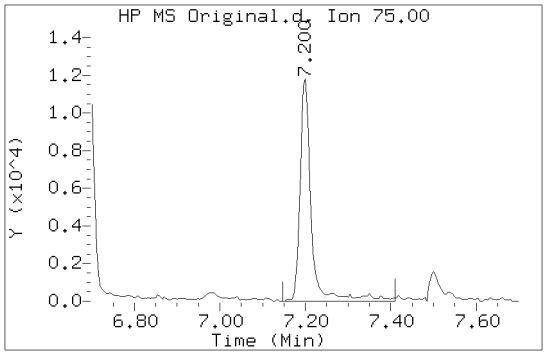
AFTER
MASS
87
AREA
8255
HEIGHT
7106
01-Aug-2023
21:03



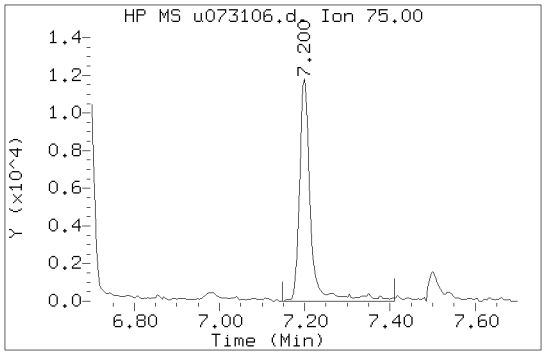
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

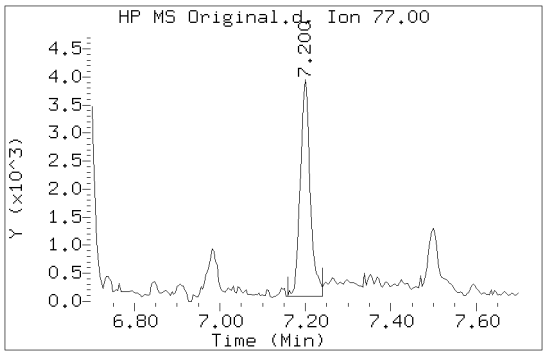
BEFORE
MASS
75
AREA
21941
HEIGHT
11807
01-Aug-2023
21:03



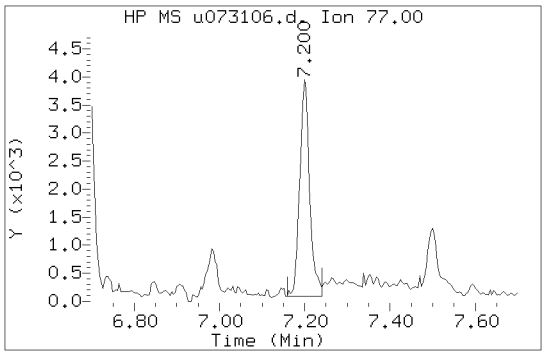
AFTER
MASS
75
AREA
21941
HEIGHT
11807
01-Aug-2023
21:03



BEFORE
MASS
77
AREA
6350
HEIGHT
3860
01-Aug-2023
21:03



AFTER
MASS
77
AREA
6350
HEIGHT
3860
01-Aug-2023
21:03



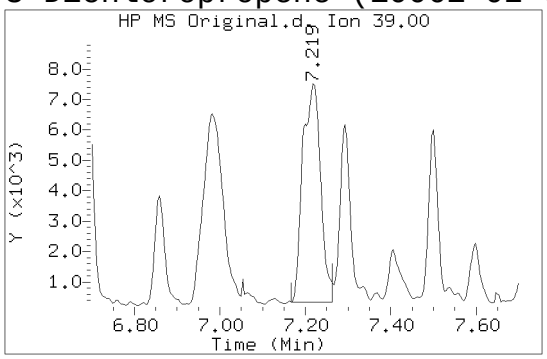
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Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

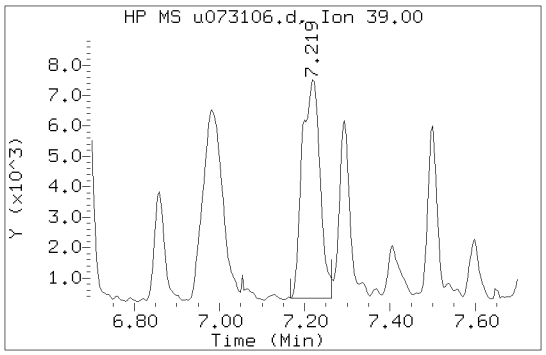
BEFORE

MASS
39
AREA
21085
HEIGHT
7177
01-Aug-2023
21:03



AFTER

MASS
39
AREA
21085
HEIGHT
7177
01-Aug-2023
21:03

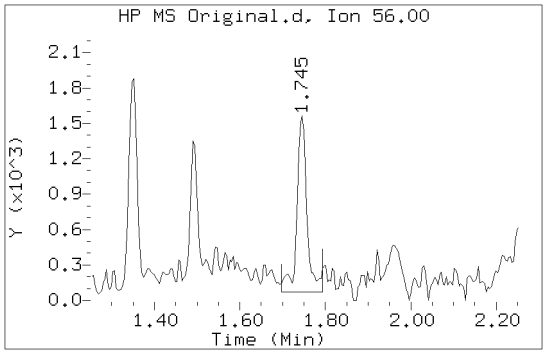


Acrolein (107-02-8)

Reason Code:

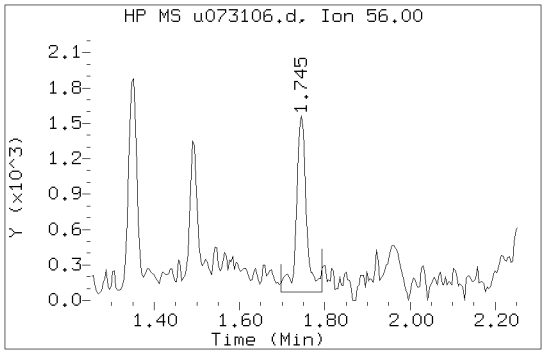
BEFORE

MASS
56
AREA
2540
HEIGHT
1493
01-Aug-2023
21:03



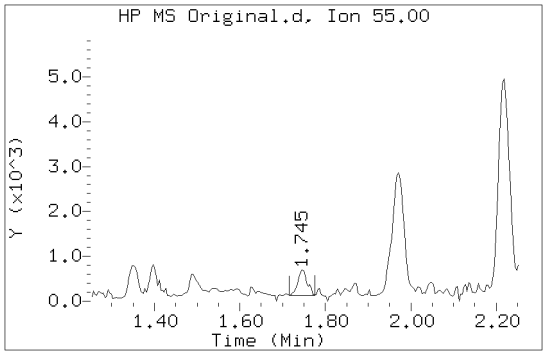
AFTER

MASS
56
AREA
2540
HEIGHT
1493
01-Aug-2023
21:03



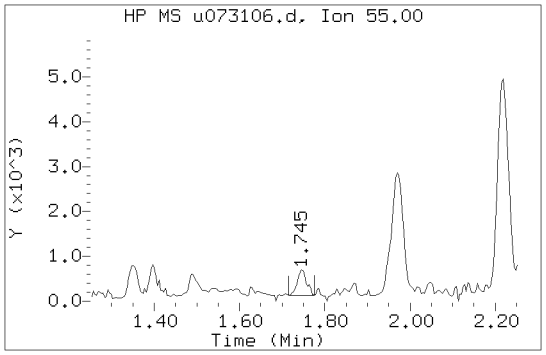
BEFORE

MASS
55
AREA
897
HEIGHT
570
01-Aug-2023
21:03



AFTER

MASS
55
AREA
897
HEIGHT
570
01-Aug-2023
21:03

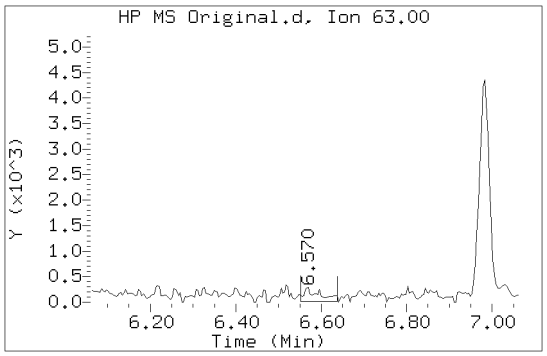


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

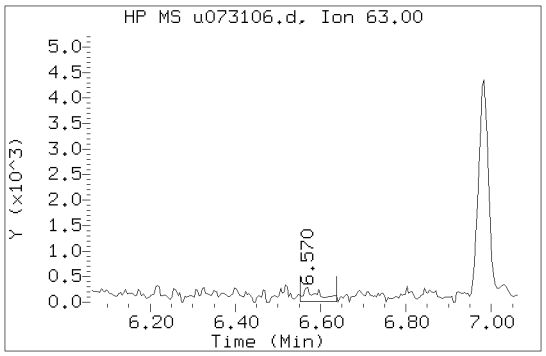
BEFORE

MASS
63
AREA
737
HEIGHT
275
01-Aug-2023
21:03



AFTER

MASS
63
AREA
737
HEIGHT
275
01-Aug-2023
21:03

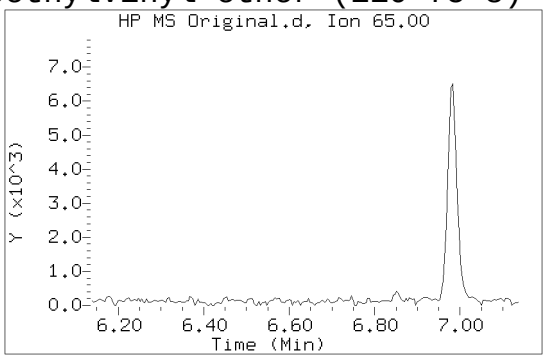


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073106.d
Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

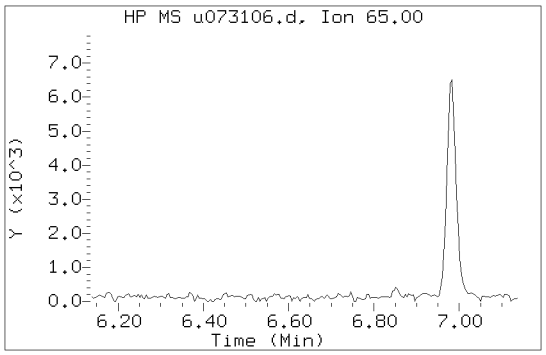
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

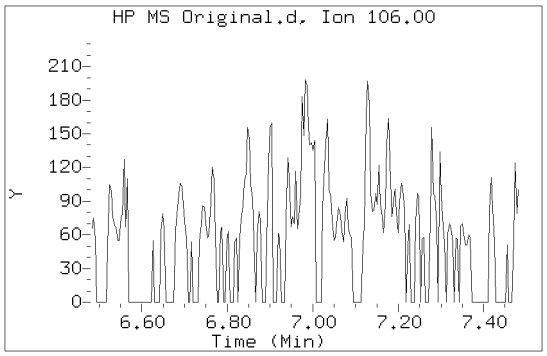
BEFORE
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



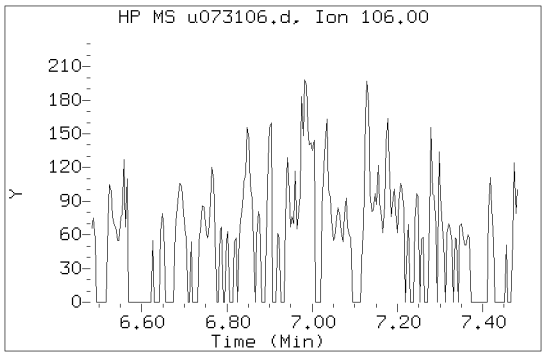
AFTER
MASS
65
AREA
0
HEIGHT
0
01-Aug-2023
21:03



BEFORE
MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03



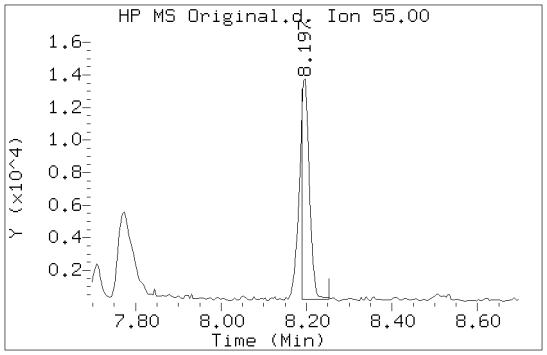
AFTER
MASS
106
AREA
0
HEIGHT
0
01-Aug-2023
21:03



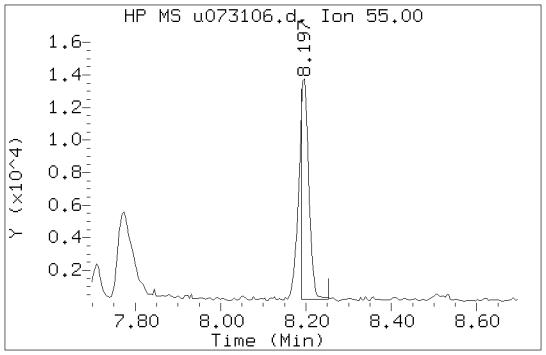
1-Chlorohexane (544-10-5)

Reason Code:

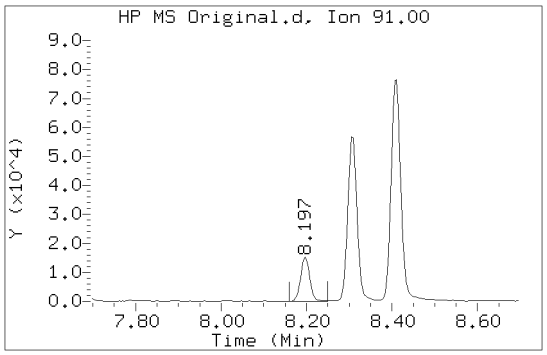
BEFORE
MASS
55
AREA
16825
HEIGHT
13526
01-Aug-2023
21:03



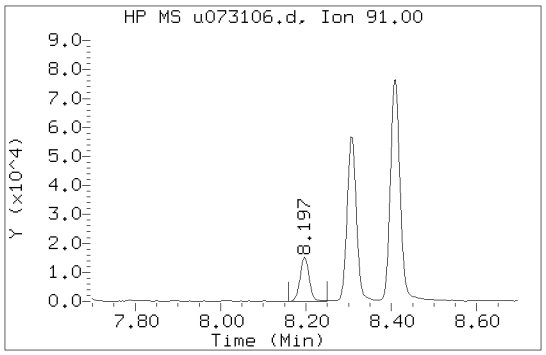
AFTER
MASS
55
AREA
16825
HEIGHT
13526
01-Aug-2023
21:03



BEFORE
MASS
91
AREA
22814
HEIGHT
15106
01-Aug-2023
21:03



AFTER
MASS
91
AREA
22814
HEIGHT
15106
01-Aug-2023
21:03



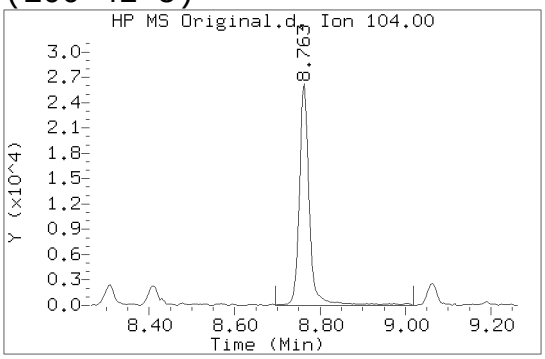
Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073106.d
Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

Styrene (100-42-5)

Reason Code:

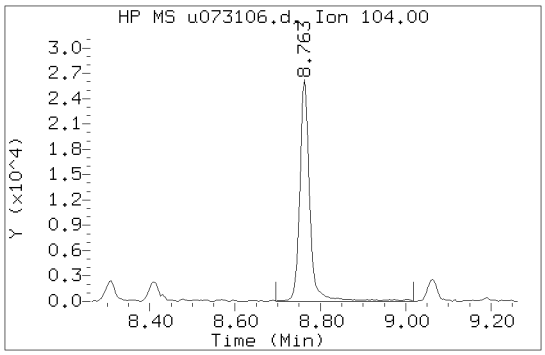
BEFORE

MASS
104
AREA
43910
HEIGHT
26240
01-Aug-2023
21:03



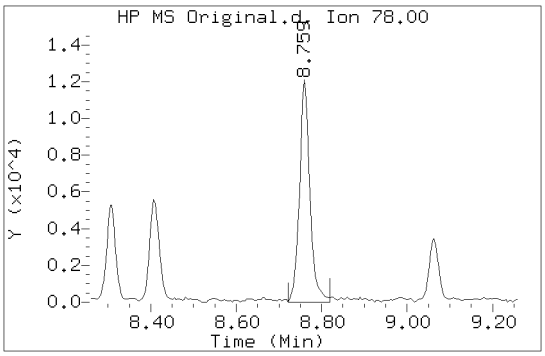
AFTER

MASS
104
AREA
43910
HEIGHT
26240
01-Aug-2023
21:03



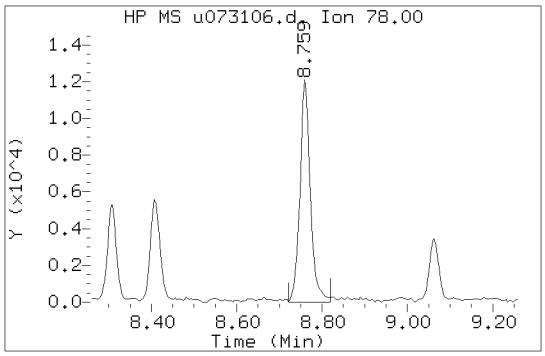
BEFORE

MASS
78
AREA
20816
HEIGHT
12099
01-Aug-2023
21:03



AFTER

MASS
78
AREA
20816
HEIGHT
12099
01-Aug-2023
21:03

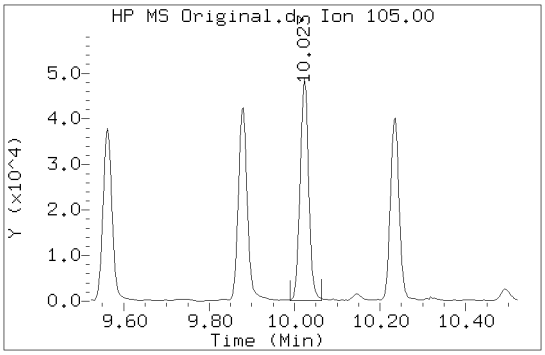


sec-Butylbenzene (135-98-8)

Reason Code:

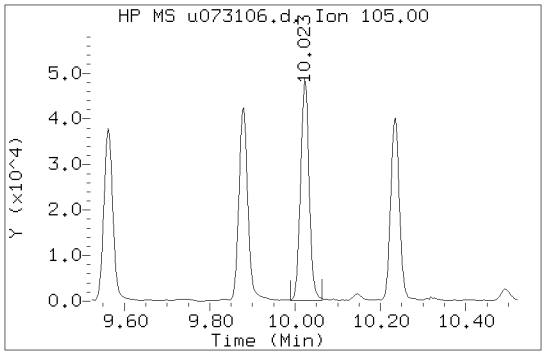
BEFORE

MASS
105
AREA
69225
HEIGHT
48599
01-Aug-2023
21:03



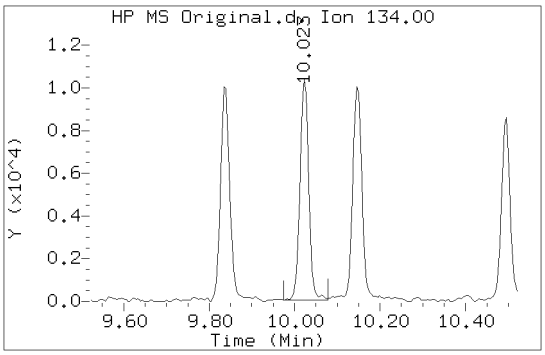
AFTER

MASS
105
AREA
69225
HEIGHT
48599
01-Aug-2023
21:03



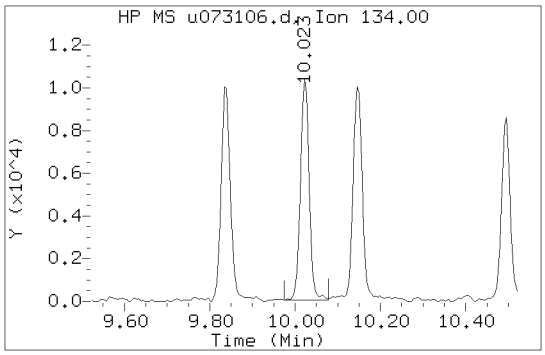
BEFORE

MASS
134
AREA
15040
HEIGHT
10312
01-Aug-2023
21:03



AFTER

MASS
134
AREA
15040
HEIGHT
10312
01-Aug-2023
21:03

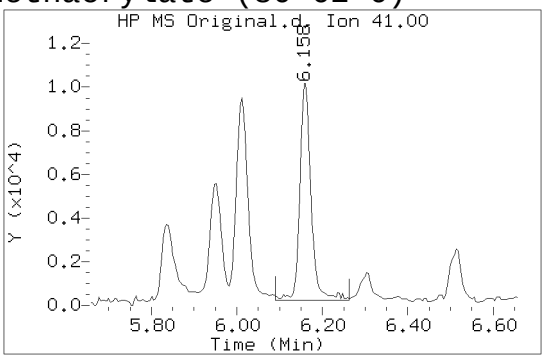


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073106.d
Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

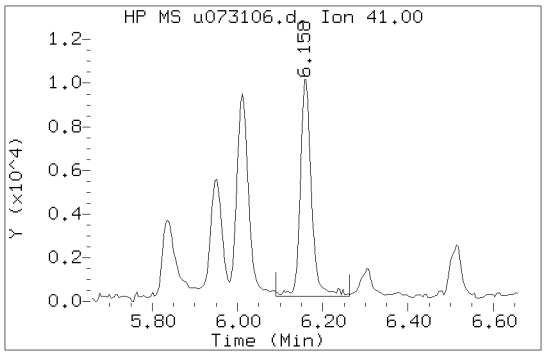
Methyl Methacrylate (80-62-6)

Reason Code:

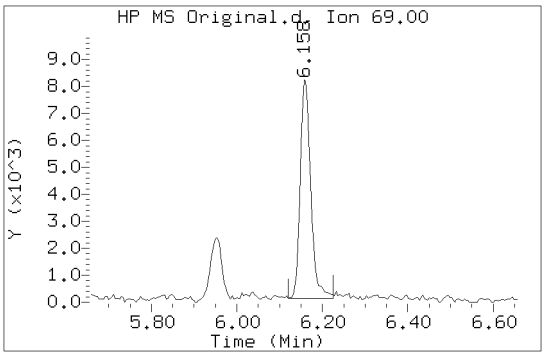
BEFORE
MASS
41
AREA
18757
HEIGHT
9935
01-Aug-2023
21:03



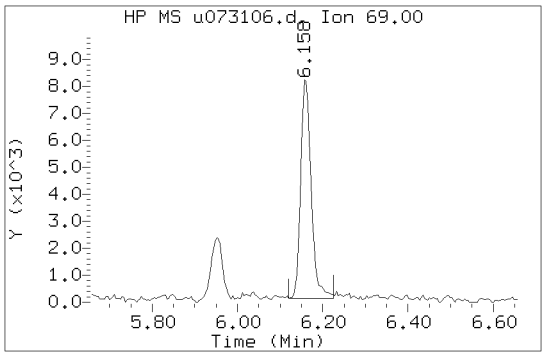
AFTER
MASS
41
AREA
18757
HEIGHT
9935
01-Aug-2023
21:03



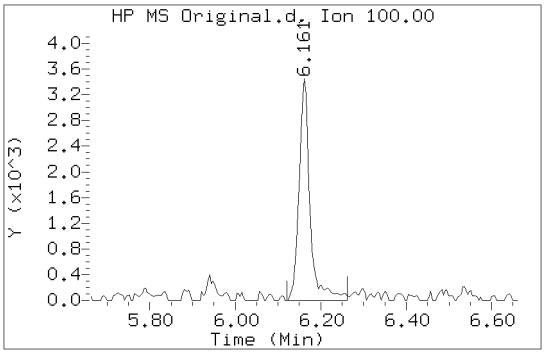
BEFORE
MASS
69
AREA
14157
HEIGHT
8087
01-Aug-2023
21:03



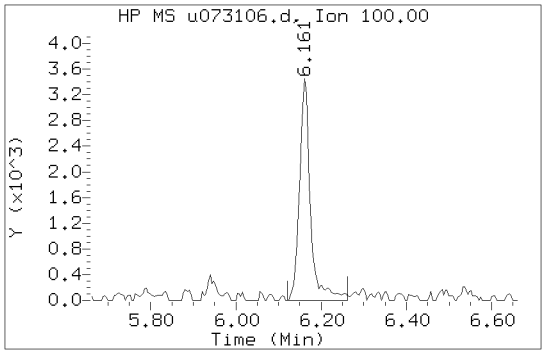
AFTER
MASS
69
AREA
14157
HEIGHT
8087
01-Aug-2023
21:03



BEFORE
MASS
100
AREA
6271
HEIGHT
3450
01-Aug-2023
21:03



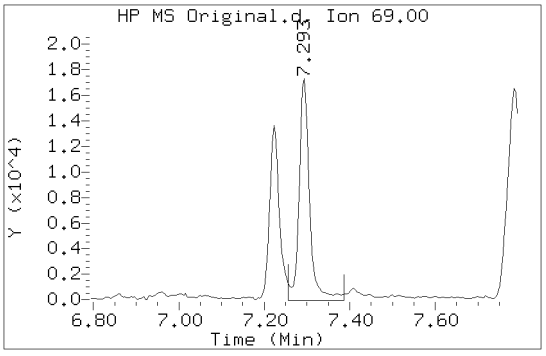
AFTER
MASS
100
AREA
6271
HEIGHT
3450
01-Aug-2023
21:03



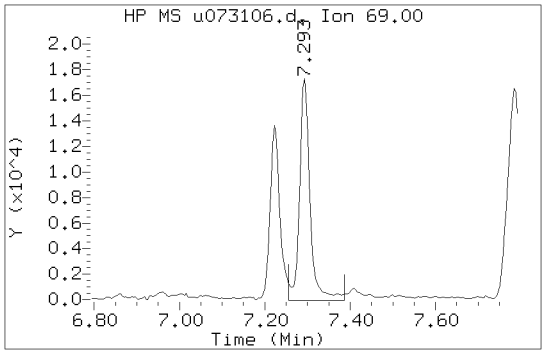
Ethyl Methacrylate (97-63-2)

Reason Code:

BEFORE
MASS
69
AREA
30207
HEIGHT
17342
01-Aug-2023
21:03



AFTER
MASS
69
AREA
30207
HEIGHT
17342
01-Aug-2023
21:03

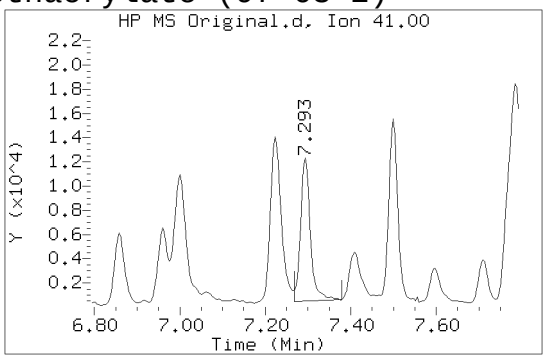


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073106.d
Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

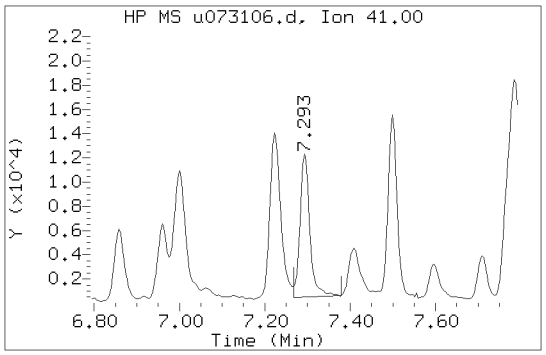
Ethyl Methacrylate (97-63-2)

Reason Code:

BEFORE
MASS
41
AREA
19359
HEIGHT
11841
01-Aug-2023
21:03



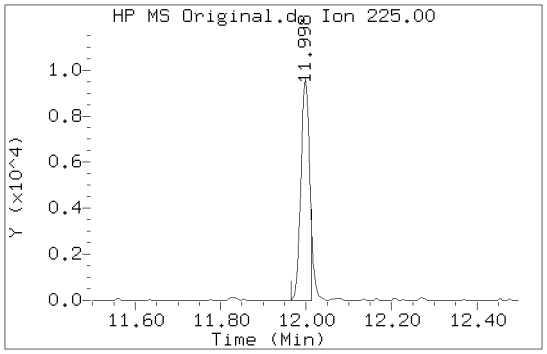
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MASS
41
AREA
19359
HEIGHT
11841
01-Aug-2023
21:03



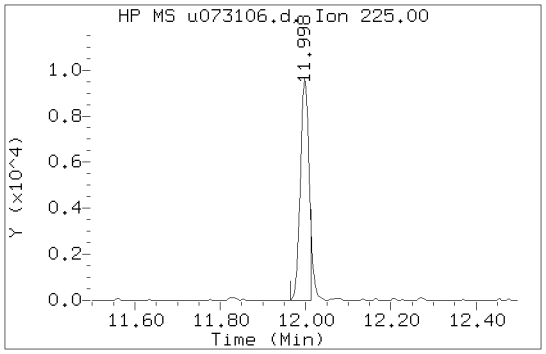
Hexachlorobutadiene (87-68-3)

Reason Code:

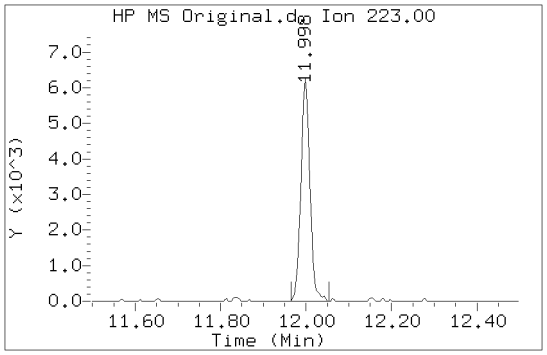
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225
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13619
HEIGHT
9624
01-Aug-2023
21:03



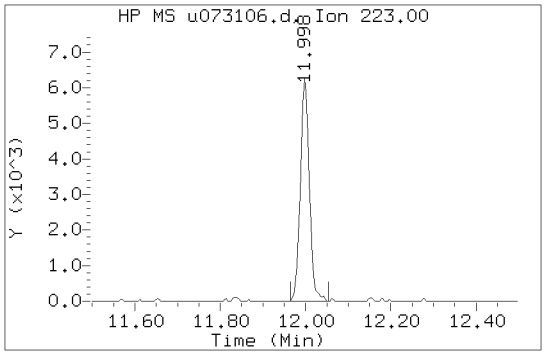
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13619
HEIGHT
9624
01-Aug-2023
21:03



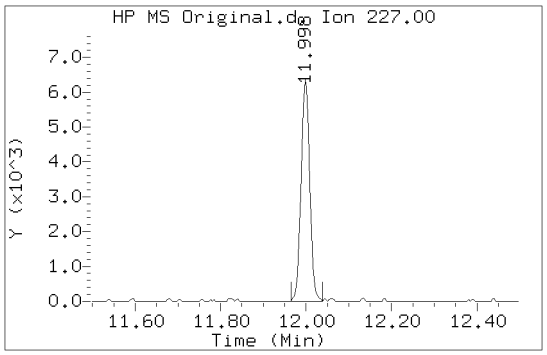
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223
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9370
HEIGHT
6248
01-Aug-2023
21:03



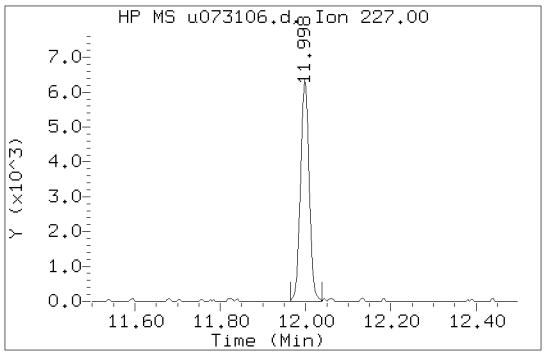
AFTER
MASS
223
AREA
9370
HEIGHT
6248
01-Aug-2023
21:03



BEFORE
MASS
227
AREA
9177
HEIGHT
6360
01-Aug-2023
21:03



AFTER
MASS
227
AREA
9177
HEIGHT
6360
01-Aug-2023
21:03

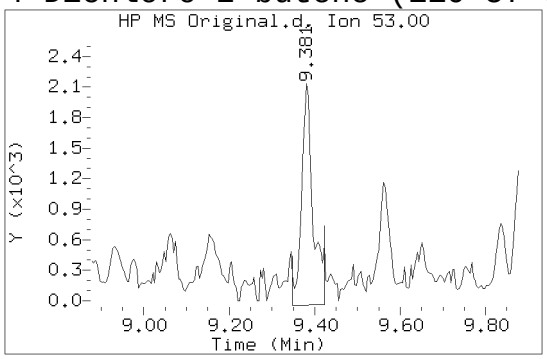


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InstruID : VOA9.i
LabSampID : VSTD005

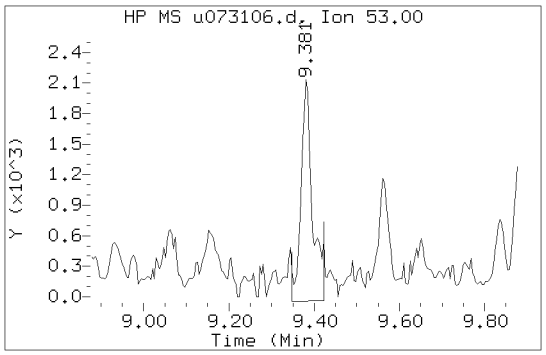
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

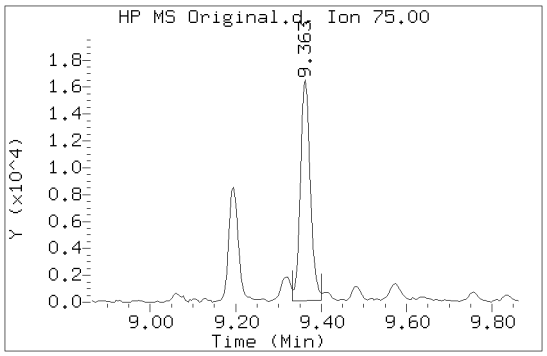
BEFORE
MASS
53
AREA
4112
HEIGHT
2172
01-Aug-2023
21:03



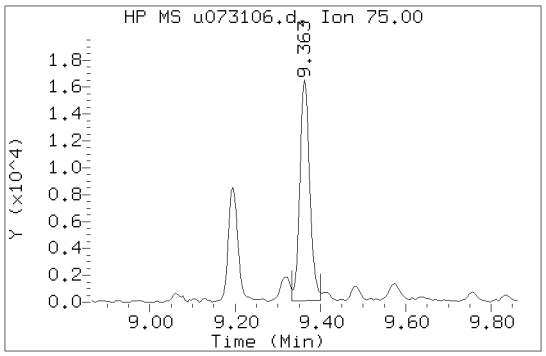
AFTER
MASS
53
AREA
4112
HEIGHT
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01-Aug-2023
21:03



BEFORE
MASS
75
AREA
27211
HEIGHT
16421
01-Aug-2023
21:03



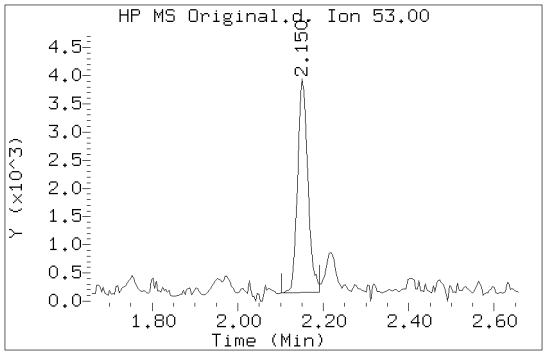
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MASS
75
AREA
27211
HEIGHT
16421
01-Aug-2023
21:03



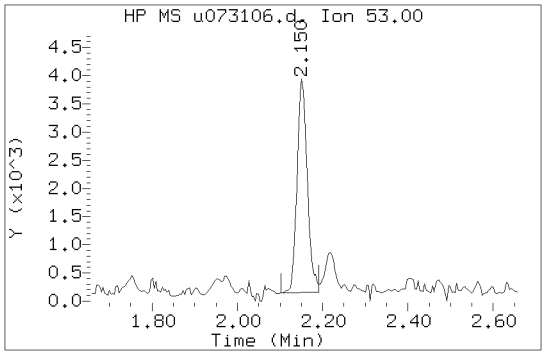
Chloroprene (126-99-8)

Reason Code:

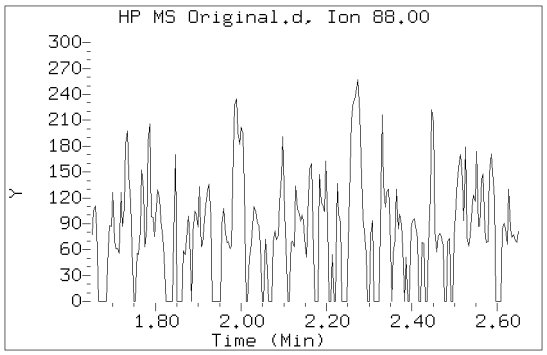
BEFORE
MASS
53
AREA
6457
HEIGHT
3787
01-Aug-2023
21:03



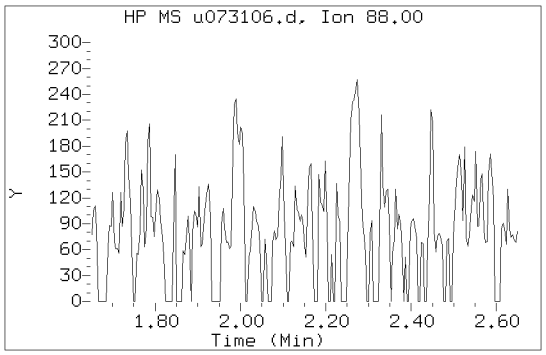
AFTER
MASS
53
AREA
6457
HEIGHT
3787
01-Aug-2023
21:03



BEFORE
MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



AFTER
MASS
88
AREA
0
HEIGHT
0
01-Aug-2023
21:03



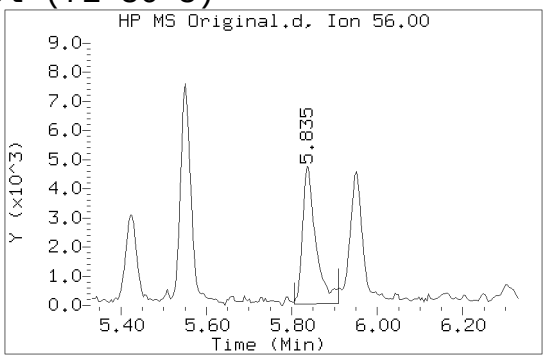
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Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

n-Butanol (71-36-3)

Reason Code:

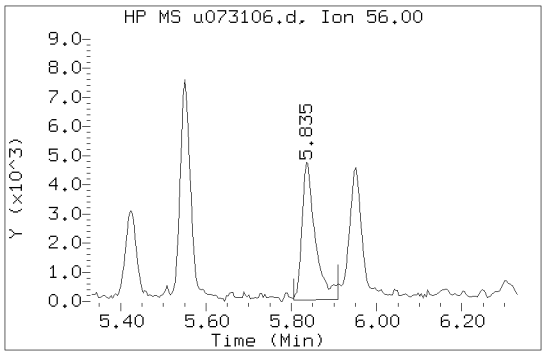
BEFORE

MASS
56
AREA
10577
HEIGHT
4724
01-Aug-2023
21:03



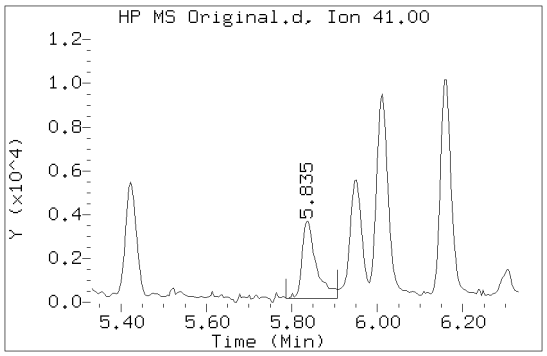
AFTER

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56
AREA
10577
HEIGHT
4724
01-Aug-2023
21:03



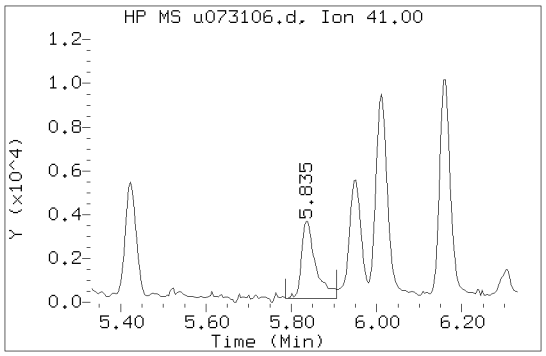
BEFORE

MASS
41
AREA
8306
HEIGHT
3501
01-Aug-2023
21:03



AFTER

MASS
41
AREA
8306
HEIGHT
3501
01-Aug-2023
21:03

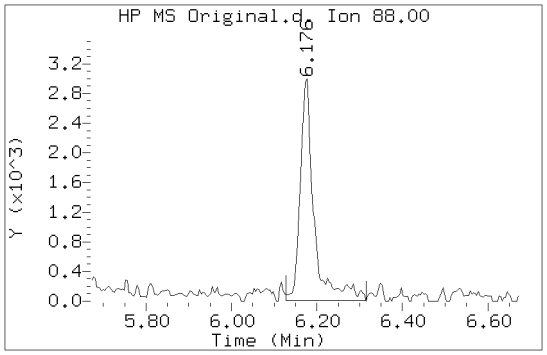


1,4-Dioxane ()

Reason Code:

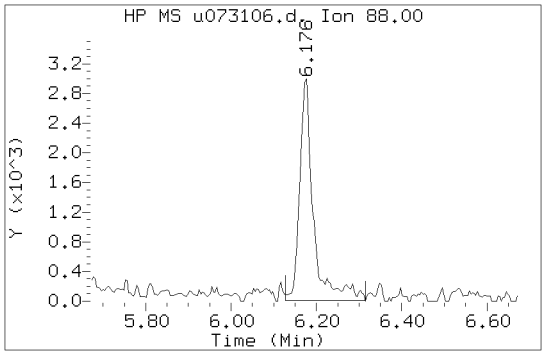
BEFORE

MASS
88
AREA
6838
HEIGHT
2989
01-Aug-2023
21:03



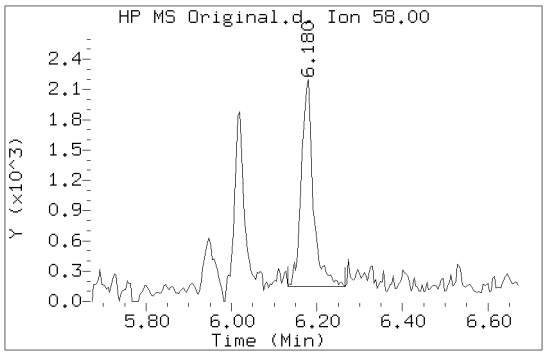
AFTER

MASS
88
AREA
6838
HEIGHT
2989
01-Aug-2023
21:03



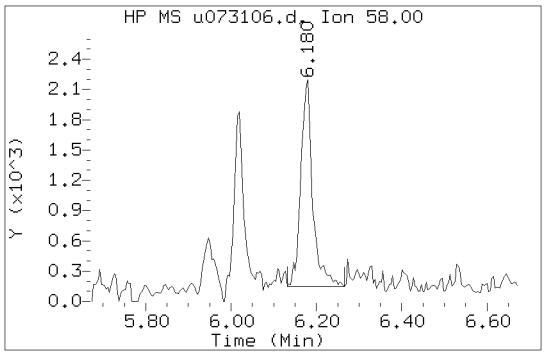
BEFORE

MASS
58
AREA
4048
HEIGHT
2050
01-Aug-2023
21:03



AFTER

MASS
58
AREA
4048
HEIGHT
2050
01-Aug-2023
21:03

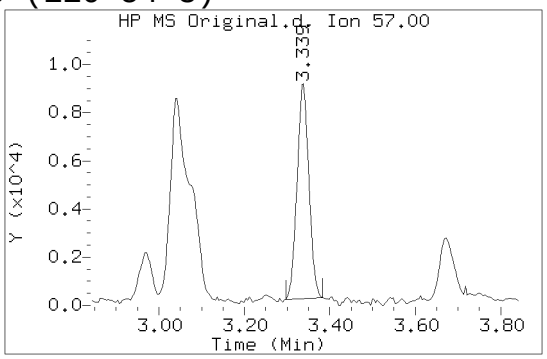


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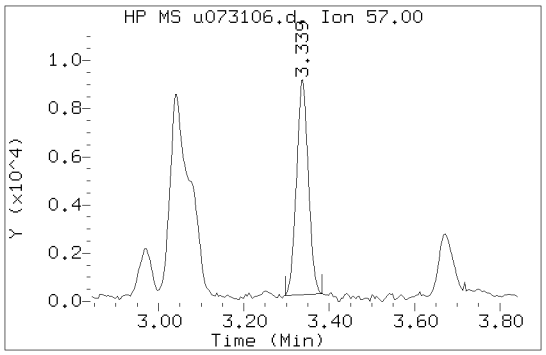
n-Hexane (110-54-3)

Reason Code:

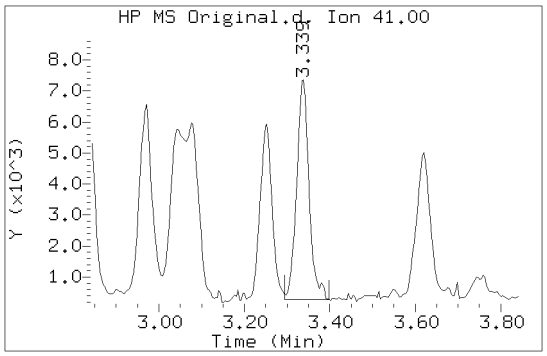
BEFORE
MASS
57
AREA
17510
HEIGHT
8919
01-Aug-2023
21:03



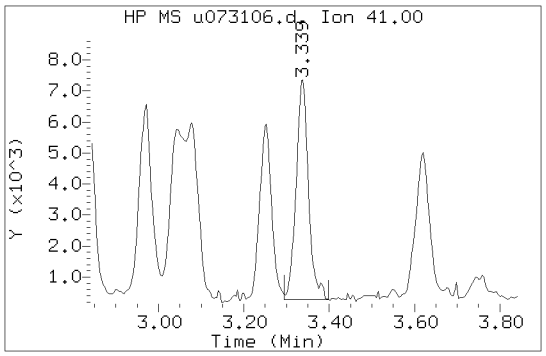
AFTER
MASS
57
AREA
17510
HEIGHT
8919
01-Aug-2023
21:03



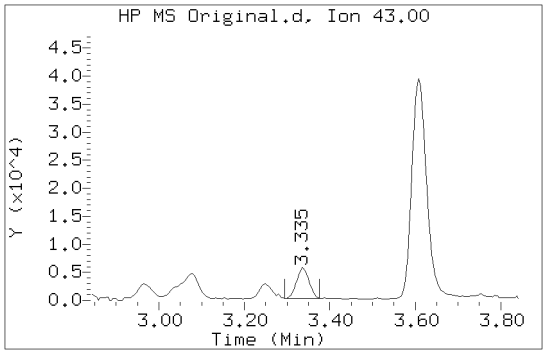
BEFORE
MASS
41
AREA
14632
HEIGHT
7081
01-Aug-2023
21:03



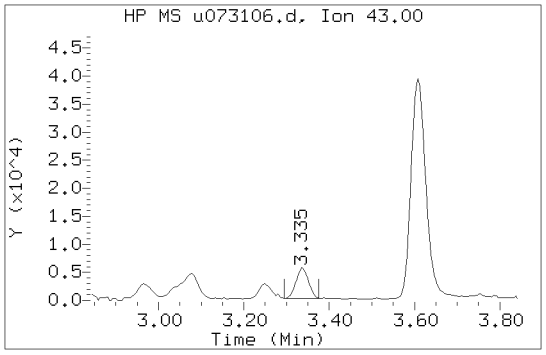
AFTER
MASS
41
AREA
14632
HEIGHT
7081
01-Aug-2023
21:03



BEFORE
MASS
43
AREA
11064
HEIGHT
5461
01-Aug-2023
21:03



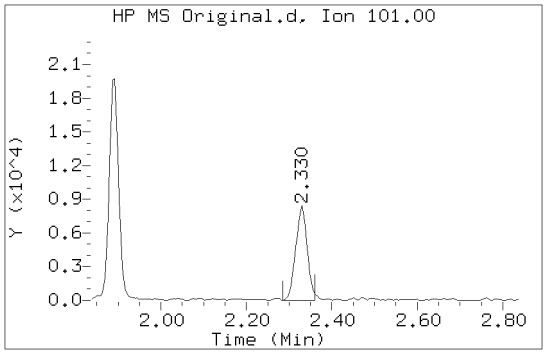
AFTER
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43
AREA
11064
HEIGHT
5461
01-Aug-2023
21:03



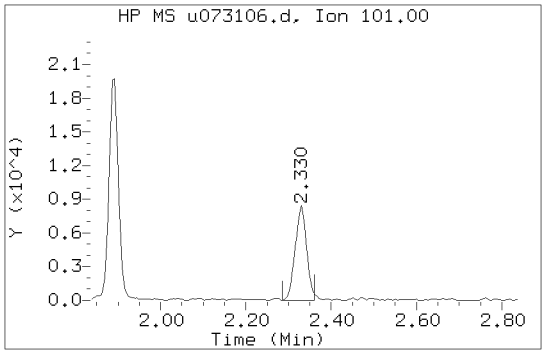
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
101
AREA
16029
HEIGHT
8452
01-Aug-2023
21:03



AFTER
MASS
101
AREA
16029
HEIGHT
8452
01-Aug-2023
21:03

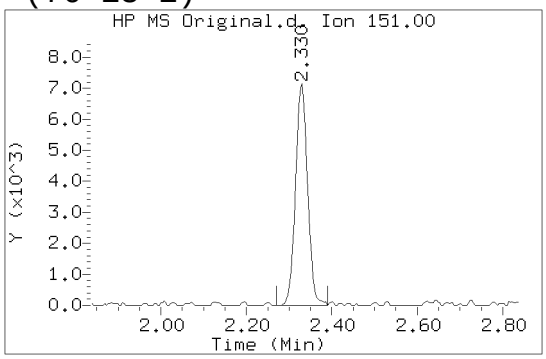


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InstruID : VOA9.i
LabSampID : VSTD005

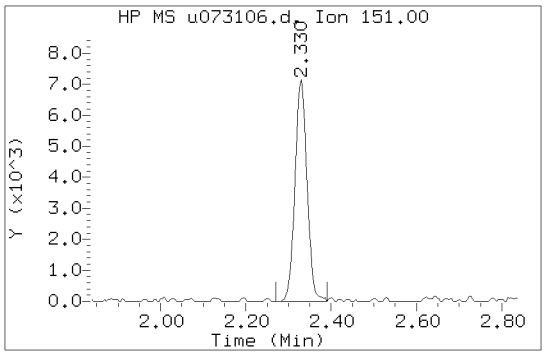
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
151
AREA
14333
HEIGHT
7146
01-Aug-2023
21:03



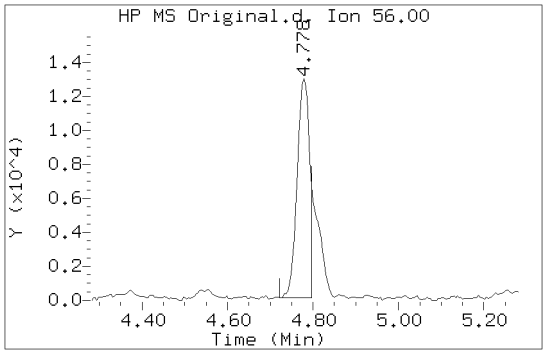
AFTER
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151
AREA
14333
HEIGHT
7146
01-Aug-2023
21:03



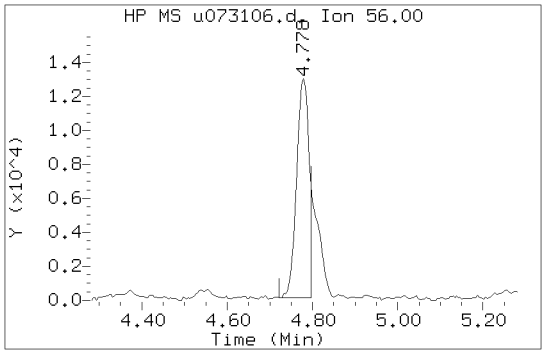
Cyclohexane (110-82-7)

Reason Code:

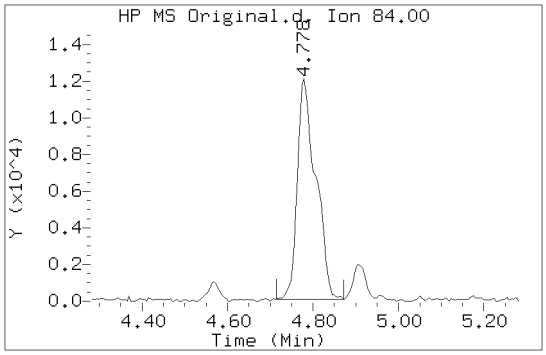
BEFORE
MASS
56
AREA
26286
HEIGHT
12886
01-Aug-2023
21:03



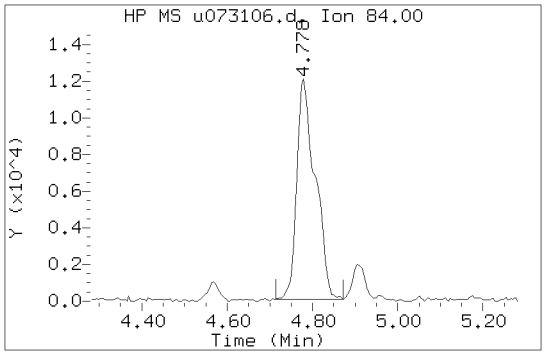
AFTER
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AREA
26286
HEIGHT
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01-Aug-2023
21:03



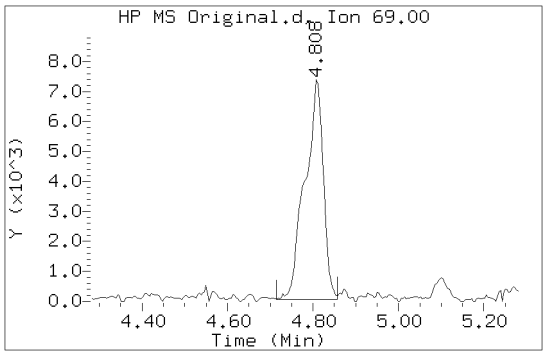
BEFORE
MASS
84
AREA
36483
HEIGHT
12015
01-Aug-2023
21:03



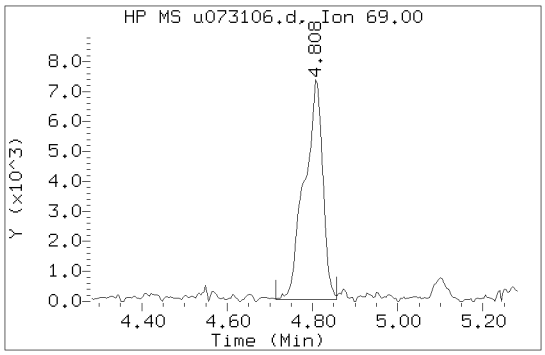
AFTER
MASS
84
AREA
36483
HEIGHT
12015
01-Aug-2023
21:03



BEFORE
MASS
69
AREA
21975
HEIGHT
7326
01-Aug-2023
21:03



AFTER
MASS
69
AREA
21975
HEIGHT
7326
01-Aug-2023
21:03

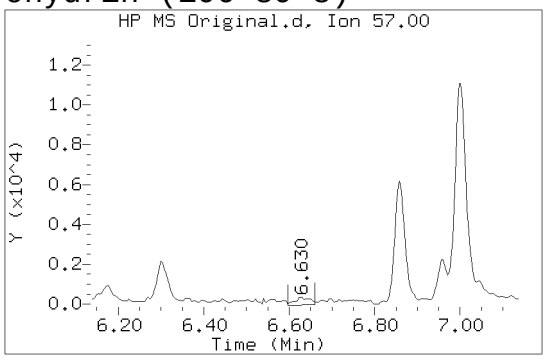


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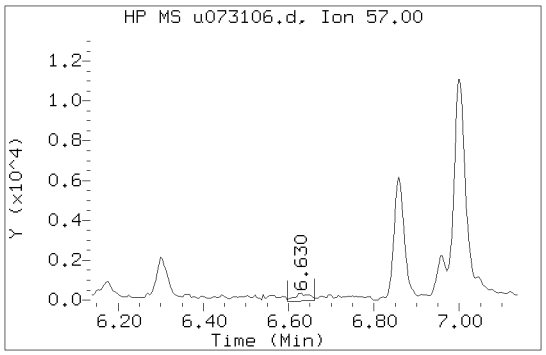
Epichlorohydrin (106-89-8)

Reason Code:

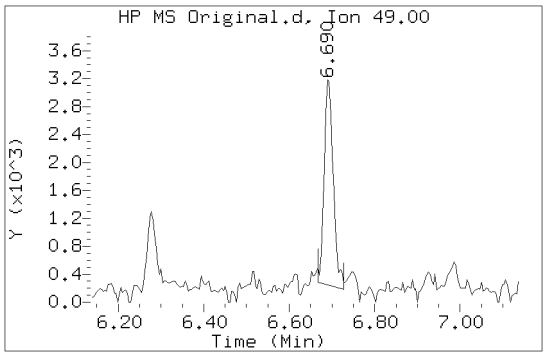
BEFORE
MASS
57
AREA
991
HEIGHT
399
01-Aug-2023
21:03



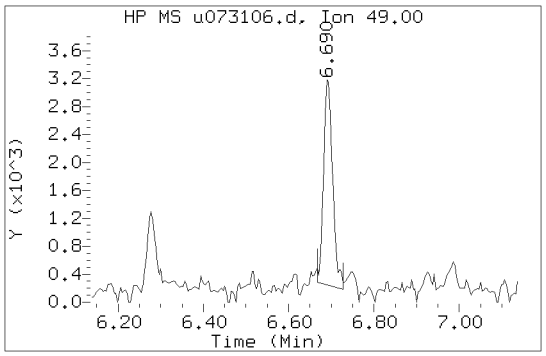
AFTER
MASS
57
AREA
991
HEIGHT
399
01-Aug-2023
21:03



BEFORE
MASS
49
AREA
4381
HEIGHT
2935
01-Aug-2023
21:03



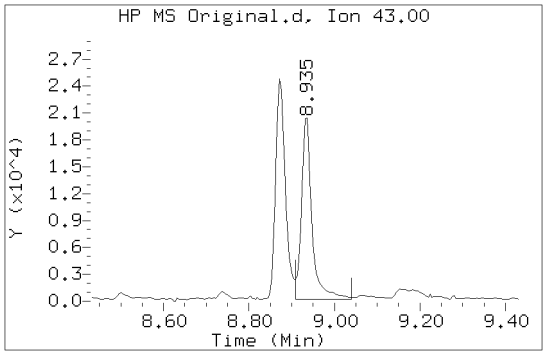
AFTER
MASS
49
AREA
4381
HEIGHT
2935
01-Aug-2023
21:03



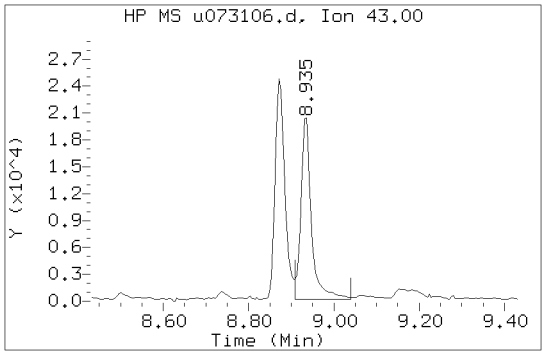
n-Amyl acetate (628-63-7)

Reason Code:

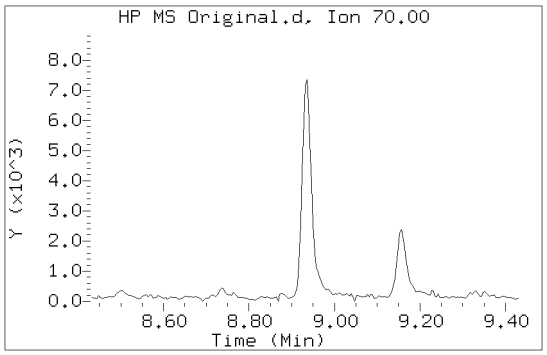
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43
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01-Aug-2023
21:03



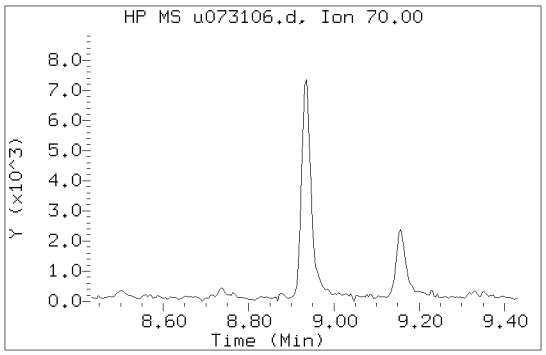
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01-Aug-2023
21:03



BEFORE
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70
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01-Aug-2023
21:03



AFTER
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HEIGHT
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01-Aug-2023
21:03

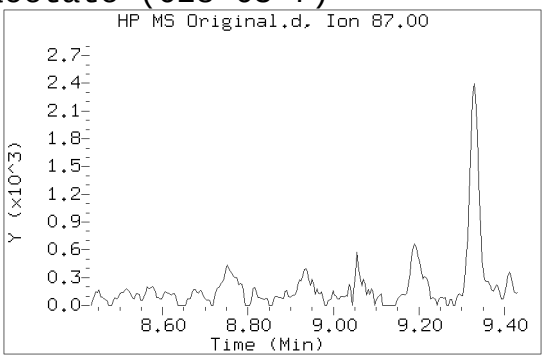


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Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

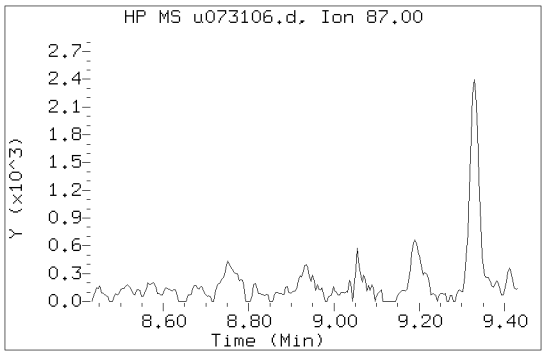
n-Amyl acetate (628-63-7)

Reason Code:

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01-Aug-2023
21:03



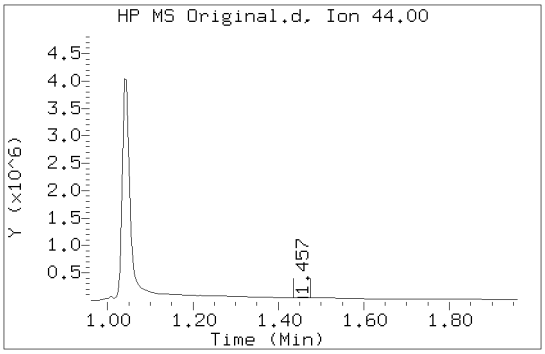
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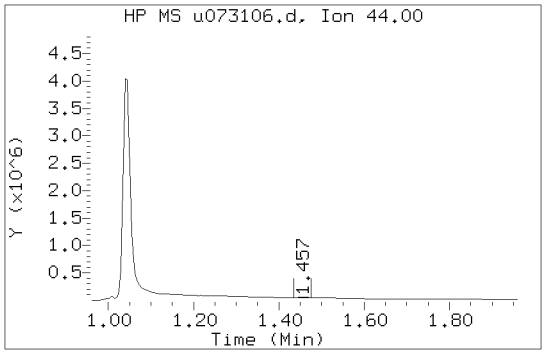
Acetaldehyde (75-07-0)

Reason Code:

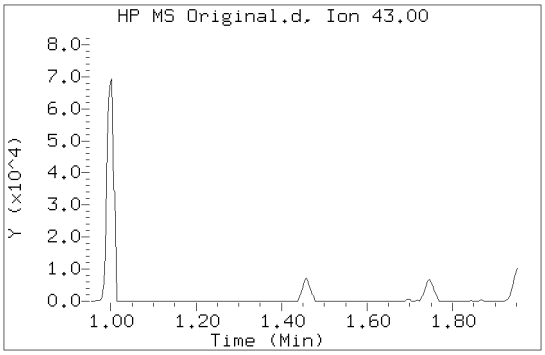
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01-Aug-2023
21:03



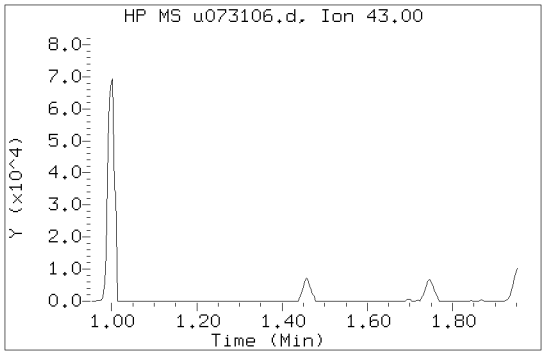
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21:03



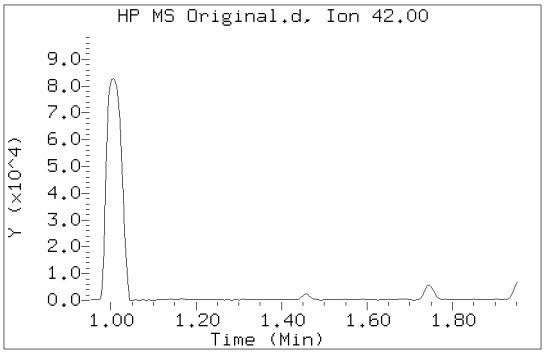
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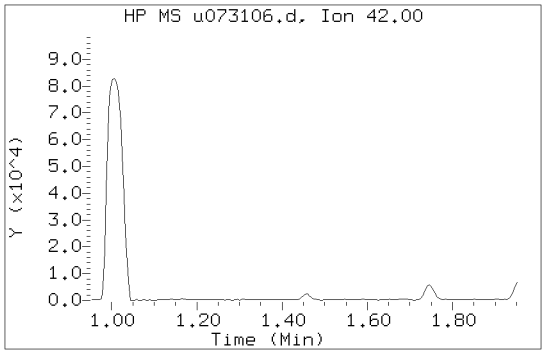
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01-Aug-2023
21:03



BEFORE
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42
AREA
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21:03



AFTER
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01-Aug-2023
21:03

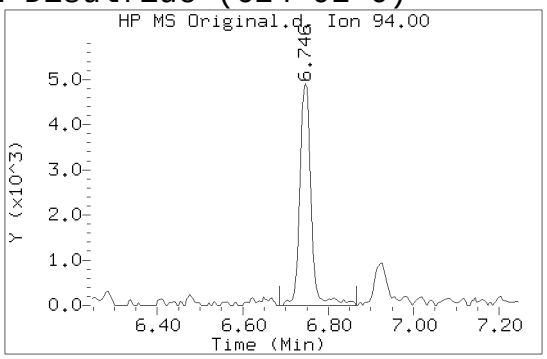


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Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

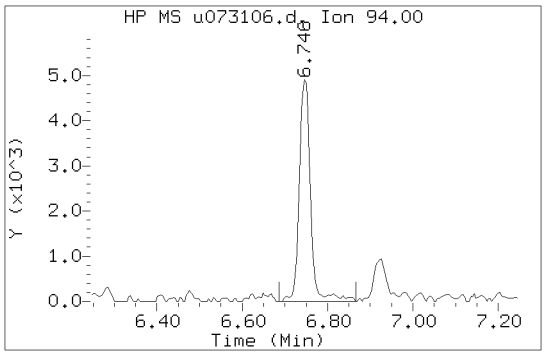
Dimethyl Disulfide (624-92-0)

Reason Code:

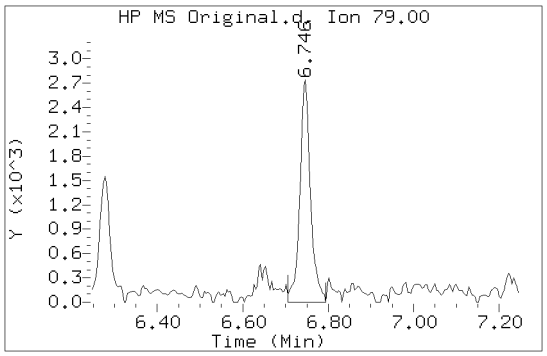
BEFORE
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AREA
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HEIGHT
4909
01-Aug-2023
21:03



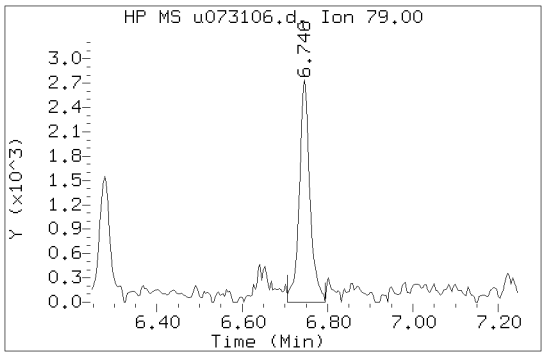
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01-Aug-2023
21:03



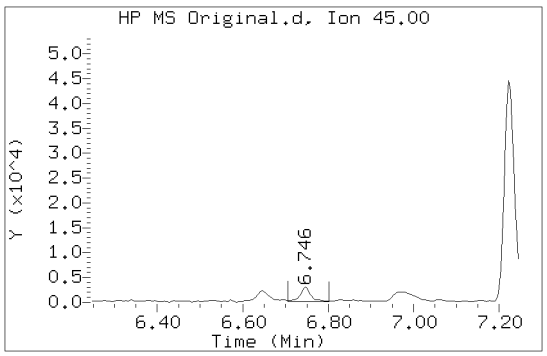
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79
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01-Aug-2023
21:03



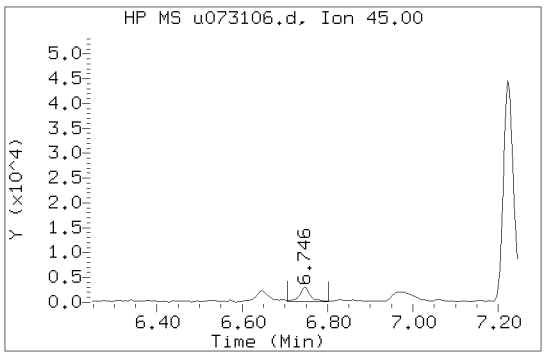
AFTER
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AREA
4843
HEIGHT
2740
01-Aug-2023
21:03



BEFORE
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HEIGHT
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01-Aug-2023
21:03



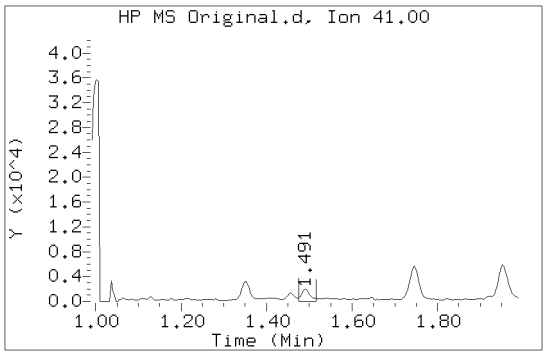
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HEIGHT
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01-Aug-2023
21:03



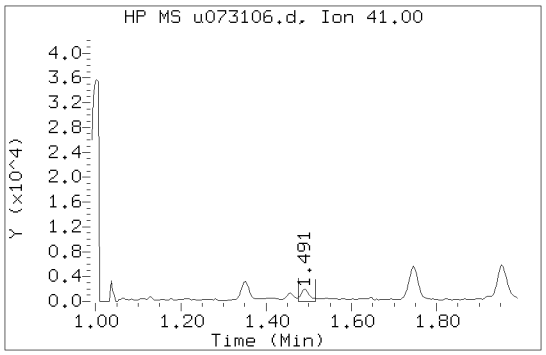
Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
41
AREA
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01-Aug-2023
21:03



AFTER
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AREA
2884
HEIGHT
1980
01-Aug-2023
21:03

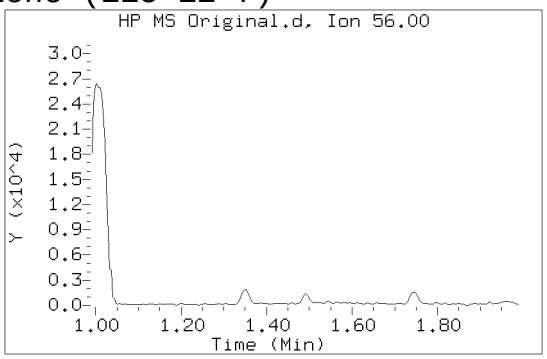


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Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

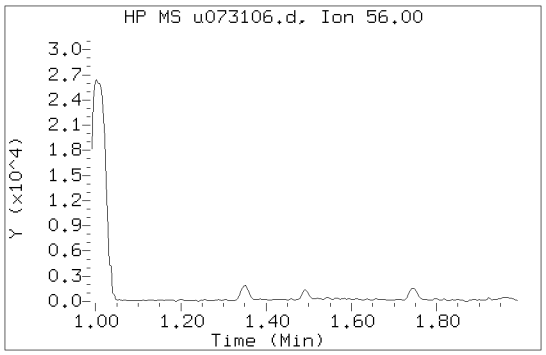
Isobutylene (115-11-7)

Reason Code:

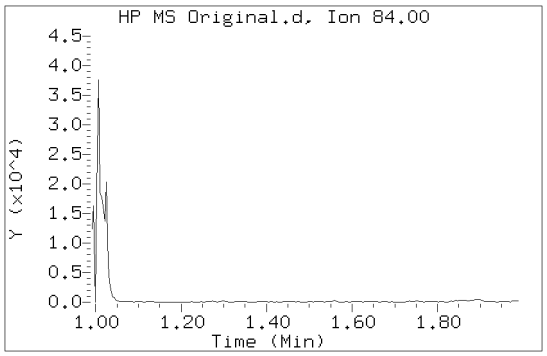
BEFORE
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56
AREA
0
HEIGHT
0
01-Aug-2023
21:03



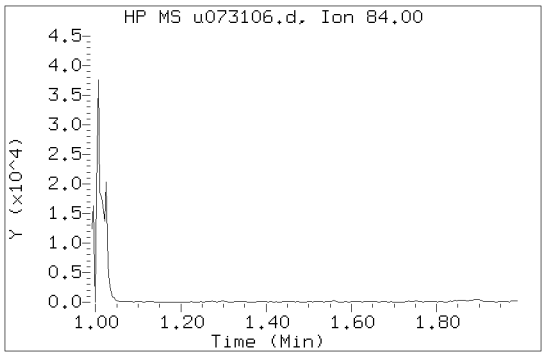
AFTER
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56
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01-Aug-2023
21:03



BEFORE
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01-Aug-2023
21:03



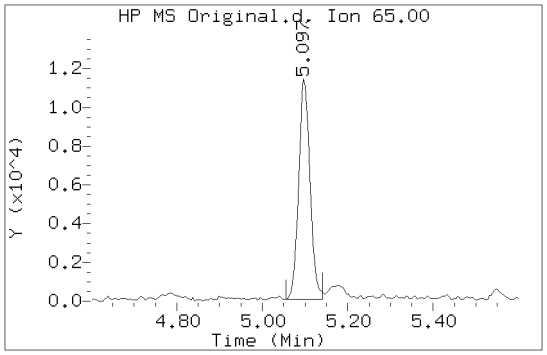
AFTER
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01-Aug-2023
21:03



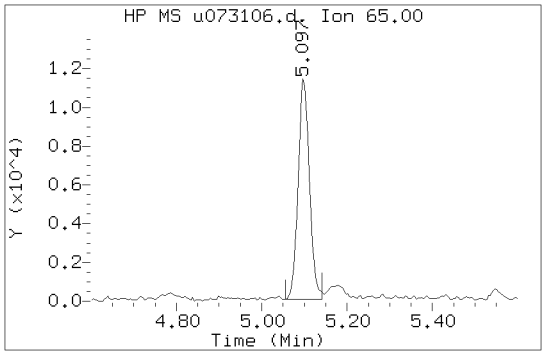
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

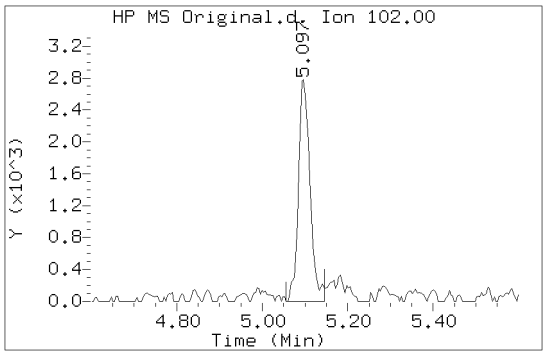
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HEIGHT
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01-Aug-2023
21:03



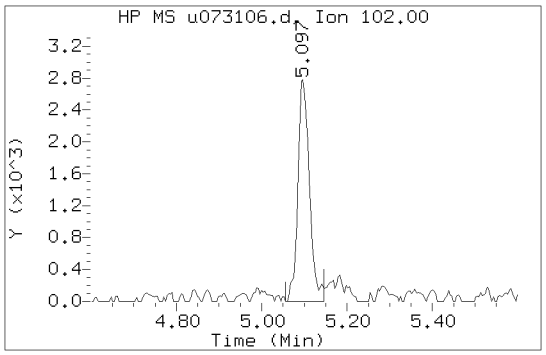
AFTER
MASS
65
AREA
21416
HEIGHT
11374
01-Aug-2023
21:03



BEFORE
MASS
102
AREA
5359
HEIGHT
2780
01-Aug-2023
21:03



AFTER
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102
AREA
5359
HEIGHT
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01-Aug-2023
21:03

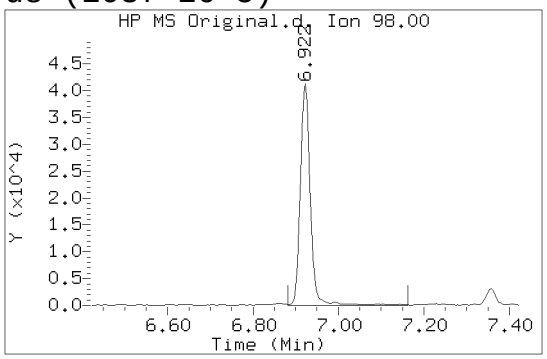


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073106.d
Inj Date : 31-JUL-2023 13:22
InstruID : VOA9.i
LabSampID : VSTD005

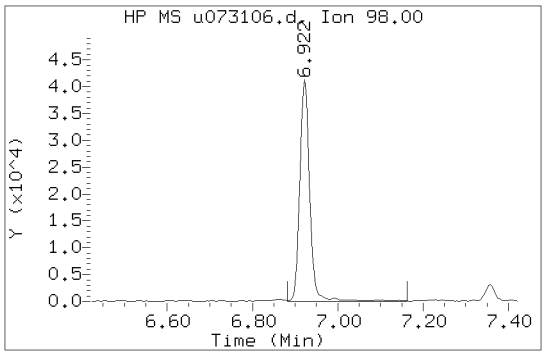
Toluene-d8 (2037-26-5)

Reason Code:

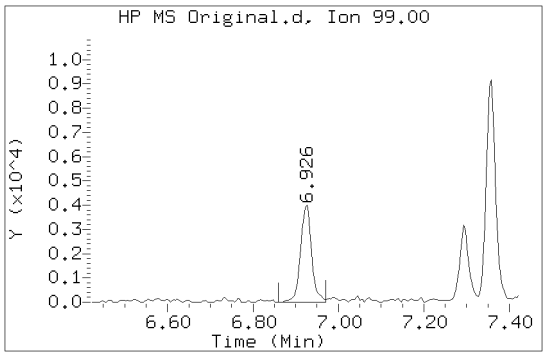
BEFORE
MASS
98
AREA
68368
HEIGHT
41285
01-Aug-2023
21:03



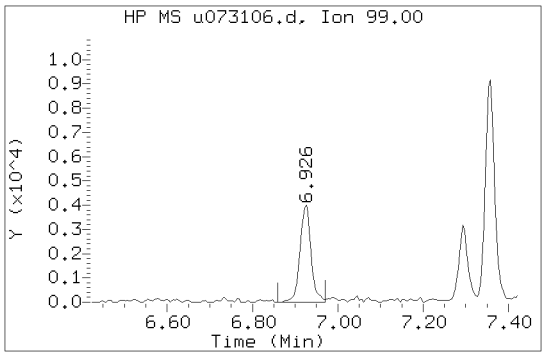
AFTER
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HEIGHT
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01-Aug-2023
21:03



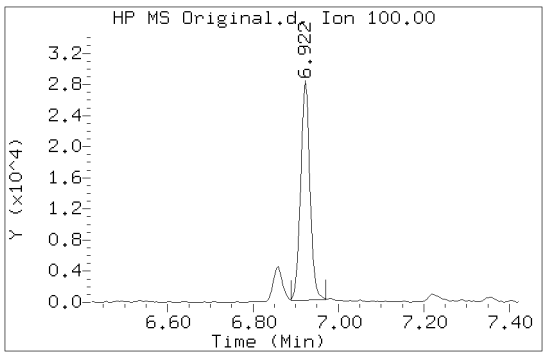
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4006
01-Aug-2023
21:03



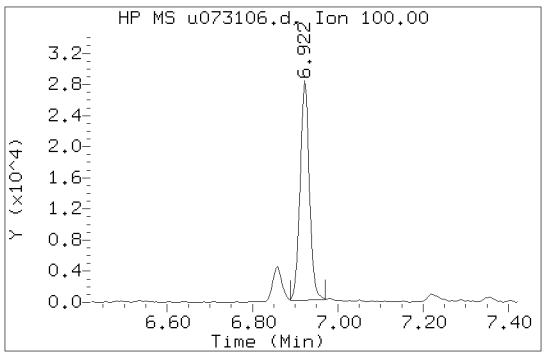
AFTER
MASS
99
AREA
7396
HEIGHT
4006
01-Aug-2023
21:03



BEFORE
MASS
100
AREA
43400
HEIGHT
28206
01-Aug-2023
21:03



AFTER
MASS
100
AREA
43400
HEIGHT
28206
01-Aug-2023
21:03



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073107.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073107.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 31-JUL-2023 13:44
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 13:22 Cal File: U073106.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.811	4.811	(1.000)	508113	50.0000	
2	Dichlorodifluoromethane	85	1.153	1.153	(0.240)	89461	20.0000	19.18
3	Chloromethane	50	1.288	1.288	(0.268)	122049	20.0000	20.26
5	Vinyl Chloride	62	1.366	1.366	(0.284)	93372	20.0000	18.66
6	Bromomethane	94	1.610	1.610	(0.335)	63845	20.0000	22.80
7	Chloroethane	64	1.689	1.689	(0.351)	60002	20.0000	19.04
8	Trichlorofluoromethane	101	1.884	1.884	(0.392)	115200	20.0000	18.65
9	Acrolein	56	1.741	1.741	(0.362)	12556	40.0000	38.52
10	Acetone	43	2.401	2.401	(0.499)	78782	40.0000	45.41
11	1,1-Dichloroethene	96	2.322	2.322	(0.483)	62778	20.0000	18.75
15	Iodomethane	142	2.457	2.457	(0.511)	100586	40.0000	34.80
16	Acrylonitrile	53	3.061	3.061	(0.636)	61984	40.0000	38.80
17	Methylene Chloride	84	2.783	2.783	(0.579)	81979	20.0000	20.04
18	Methyl tert-butyl ether	73	3.072	3.072	(0.639)	197578	20.0000	19.09
19	Carbon Disulfide	76	2.510	2.510	(0.522)	362924	40.0000	37.23
20	trans-1,2-Dichloroethene	96	3.049	3.049	(0.634)	69686	20.0000	18.57
21	Vinyl Acetate	43	3.600	3.600	(0.748)	400455	40.0000	37.29
22	1,1-Dichloroethane	63	3.503	3.503	(0.728)	126006	20.0000	18.37
24	2-Butanone	43	4.264	4.264	(0.886)	74752	40.0000	37.44
26	2,2-Dichloropropane	77	4.174	4.174	(0.868)	91735	20.0000	19.40

27	cis-1,2-Dichloroethene	96	4.189	4.189 (0.871)	82546	20.0000	19.71
28	Chloroform	83	4.564	4.564 (0.949)	154466	20.0000	19.35

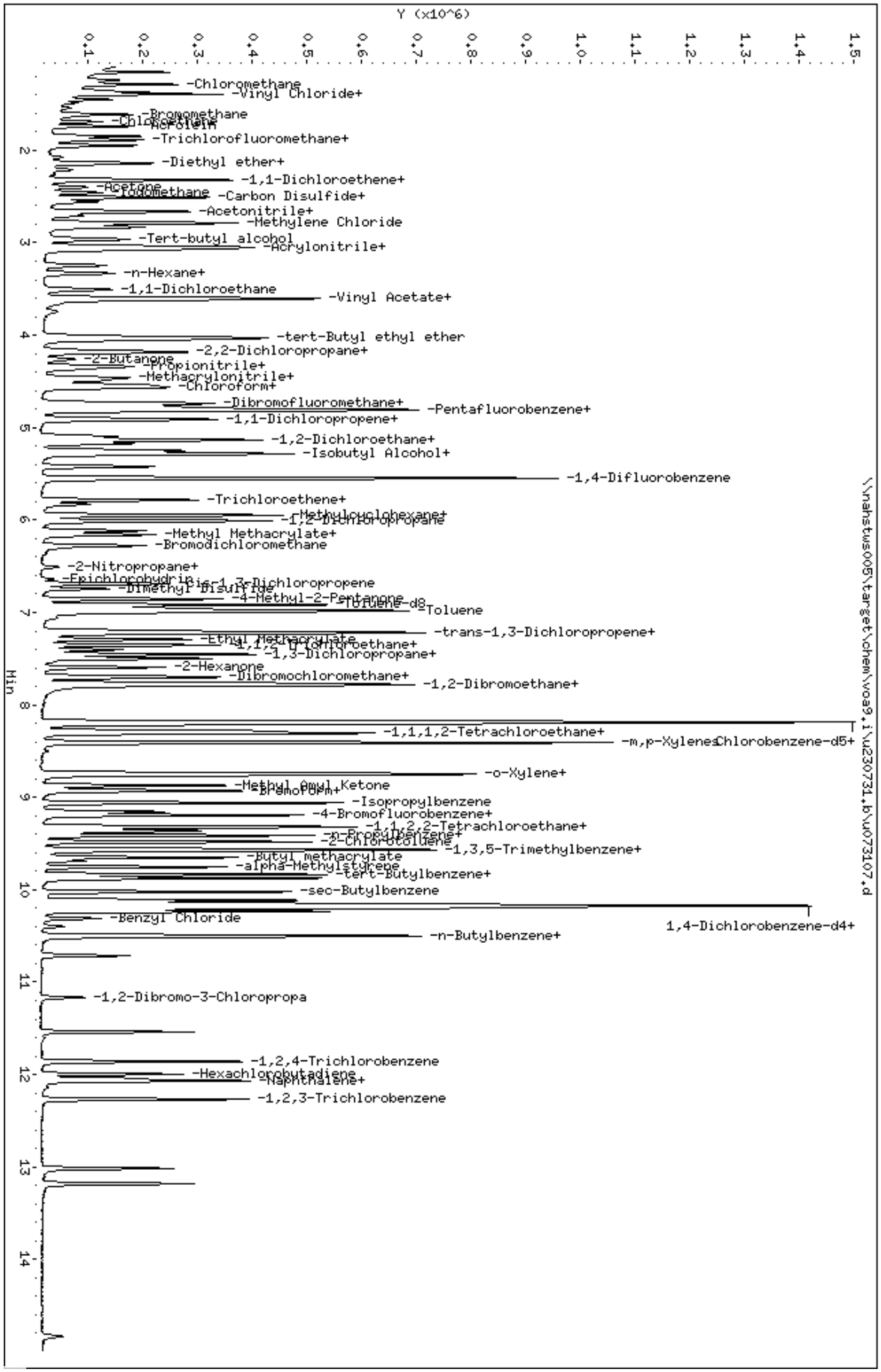
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.463	4.463	(0.928)	47382	20.0000	19.12
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	85217	20.0000	20.39
	31 1,1,1-Trichloroethane	97	4.736	4.736	(0.984)	115867	20.0000	18.66
	32 1,1-Dichloropropene	75	4.912	4.912	(0.885)	104598	20.0000	19.18
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	125987	20.0000	19.92
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	87355	20.0000	17.88
$	35 1,2-Dichloroethane-d4	65	5.092	5.092	(1.058)	92644	20.0000	20.15
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	734279	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	344926	20.0000	19.23
	38 Trichloroethene	130	5.786	5.786	(1.043)	95768	20.0000	18.89
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	109407	20.0000	19.07
	41 2-Chloroethylvinyl ether	63	6.562	6.562	(1.182)	3649	40.0000	43.19(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	94074	20.0000	19.56
	44 Dibromomethane	93	6.116	6.116	(1.102)	60570	20.0000	19.61
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	202206	40.0000	39.59
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	121394	20.0000	18.07
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	686300	50.0000	
$	48 Toluene-d8	98	6.918	6.918	(0.845)	318501	20.0000	19.95
	50 Toluene	91	6.978	6.978	(0.853)	379846	20.0000	20.35
	51 trans-1,3-Dichloropropene	75	7.195	7.195	(1.297)	99553	20.0000	18.00
	52 2-Hexanone	43	7.593	7.593	(0.928)	136038	40.0000	40.23
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	75535	20.0000	18.90
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	162196	20.0000	19.78
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	92434	20.0000	18.84
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	86434	20.0000	19.05
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	93653	20.0000	19.48
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	71609	20.0000	18.67
	59 Chlorobenzene	112	8.208	8.208	(1.003)	259416	20.0000	19.61
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	93087	20.0000	19.30
	61 Ethylbenzene	106	8.305	8.305	(1.015)	115489	20.0000	19.28
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	280953	40.0000	39.96
	63 o-Xylene	106	8.747	8.747	(1.069)	140809	20.0000	20.47
	64 Styrene	104	8.759	8.759	(1.070)	210754	20.0000	19.63
	66 Bromoform	173	8.916	8.916	(1.089)	62613	20.0000	18.27
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	330709	20.0000	19.87
	68 1,1,2,2-Tetrachloroethane	83	9.328	9.328	(0.917)	130051	20.0000	18.67
$	69 4-Bromofluorobenzene	95	9.193	9.193	(1.123)	131600	20.0000	20.32
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	361627	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	117425	20.0000	19.36
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	353551	20.0000	18.44
	74 Bromobenzene	156	9.317	9.317	(0.916)	114455	20.0000	19.13
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	240887	20.0000	19.06
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	254798	20.0000	19.98
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	290669	20.0000	20.41
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	234774	20.0000	19.60
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	259961	20.0000	20.31
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	286254	20.0000	22.41
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	235209	20.0000	22.36
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	192210	20.0000	19.24
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	204815	20.0000	18.51
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	200492	20.0000	18.05
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	196170	20.0000	19.14

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	16731	20.0000	16.66
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	119903	20.0000	19.02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	49415	20.0000	22.86
	92 Naphthalene	128	12.069	12.069	(1.186)	276874	20.0000	17.69
	93 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.206)	120721	20.0000	18.76
M	94 1,2-Dichloroethylene (total)	96				152232	40.0000	
M	95 Xylenes (total)	106				421762	60.0000	
	135 1,4-Dioxane	88	6.168	6.168	(1.282)	27650	400.000	379.53(M)
	141 Cyclohexane	56	4.774	4.774	(0.992)	110200	20.0000	19.29
	138 Freon TF	101	2.322	2.322	(0.483)	59963	20.0000	23.21
	140 1,3-Butadiene	54	1.392	1.392	(0.289)	74085	20.0000	18.31
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	210480	20.0000	19.67
	146 Methyl Acetate	43	2.705	2.705	(0.562)	68962	20.0000	18.91
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.616)	172724	400.000	402.47
	149 Isopropyl Alcohol	45	2.555	2.555	(0.531)	100114	400.000	356.52

QC Flag Legend

M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\voa9.i\u230731.b\u073107.d
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Client ID: VSTD020
Sample Info: VSTD020,VSTD020,1,16,
Purge Volume: 5.0
Column phase: DB624

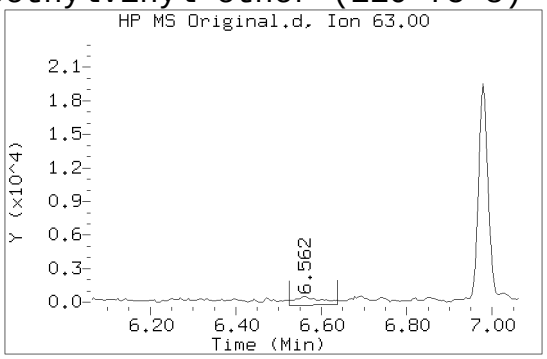
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 13:44
InstruID : VOA9.i
LabSampID : VSTD020

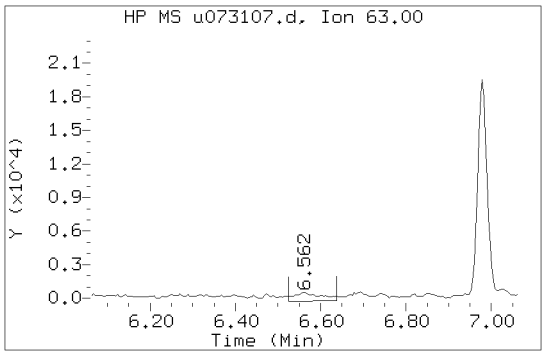
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

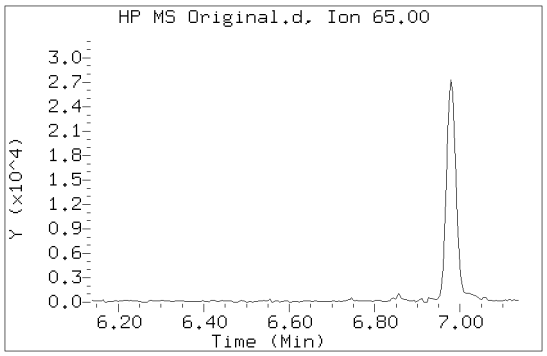
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HEIGHT
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01-Aug-2023
21:03



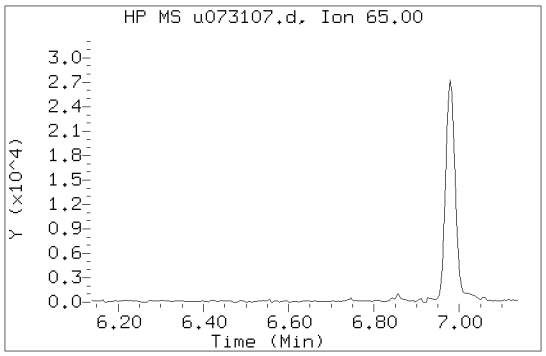
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01-Aug-2023
21:03



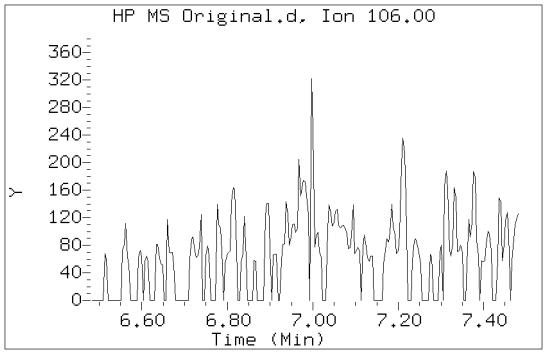
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01-Aug-2023
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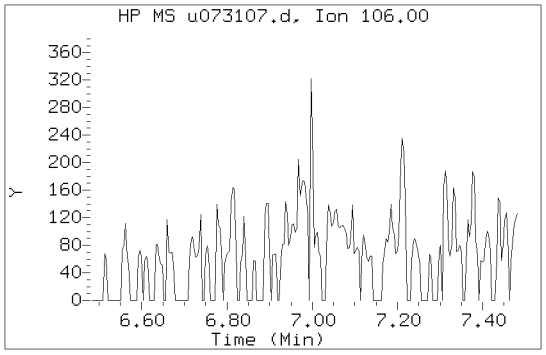
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21:03



BEFORE
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01-Aug-2023
21:03



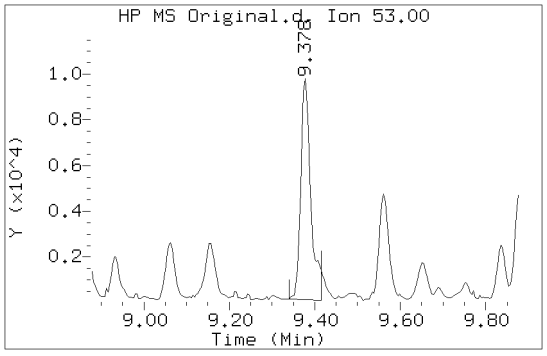
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01-Aug-2023
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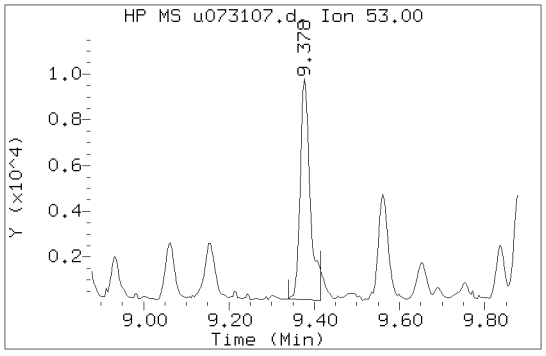
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

BEFORE
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01-Aug-2023
21:03



AFTER
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01-Aug-2023
21:03



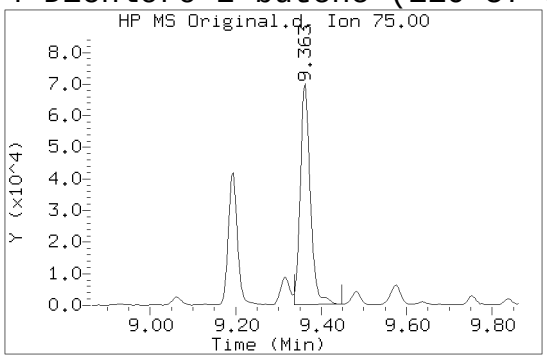
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Inj Date : 31-JUL-2023 13:44
InstruID : VOA9.i
LabSampID : VSTD020

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

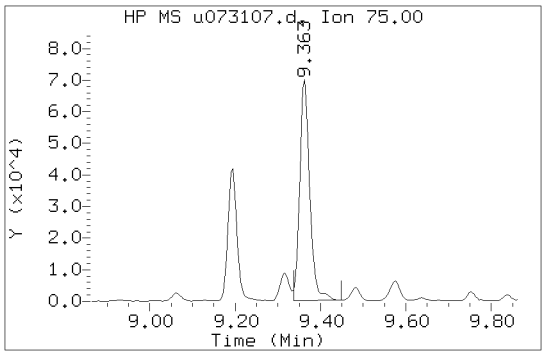
BEFORE

MASS
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AREA
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01-Aug-2023
21:03



AFTER

MASS
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AREA
116508
HEIGHT
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01-Aug-2023
21:03

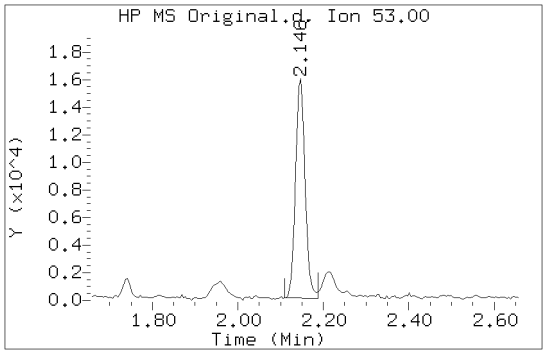


Chloroprene (126-99-8)

Reason Code:

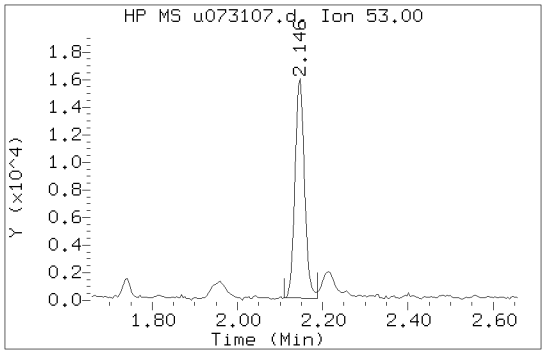
BEFORE

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01-Aug-2023
21:03



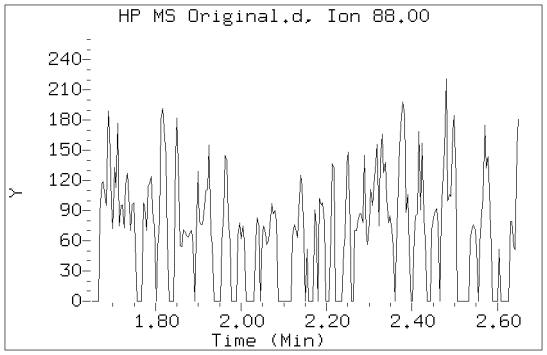
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01-Aug-2023
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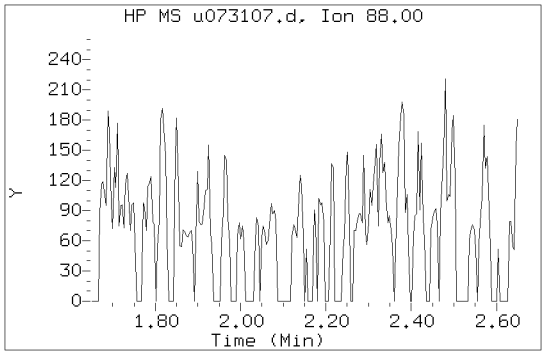
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21:03



AFTER

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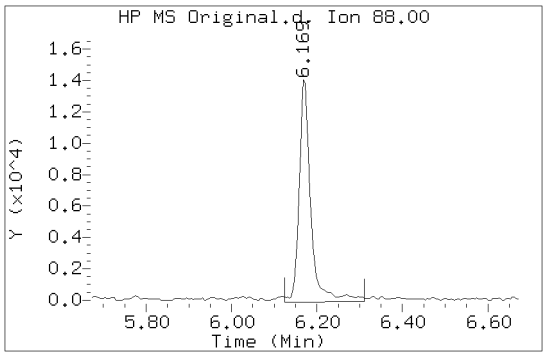


1,4-Dioxane ()

Reason Code:

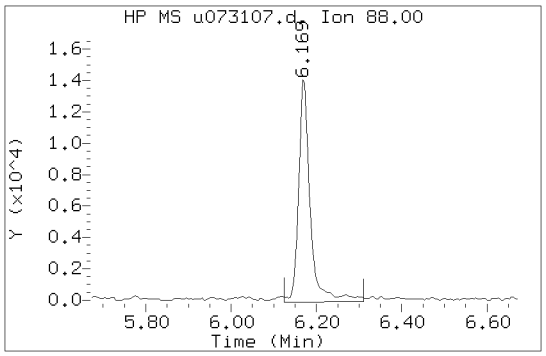
BEFORE

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AFTER

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HEIGHT
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01-Aug-2023
21:03

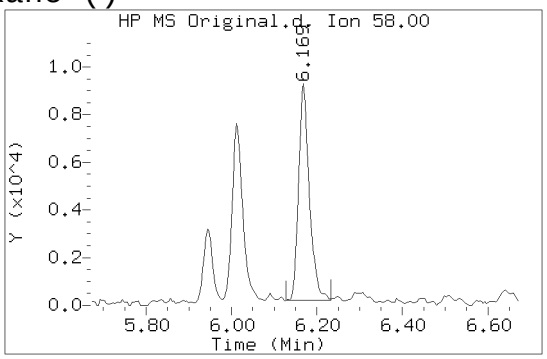


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Inj Date : 31-JUL-2023 13:44
InstruID : VOA9.i
LabSampID : VSTD020

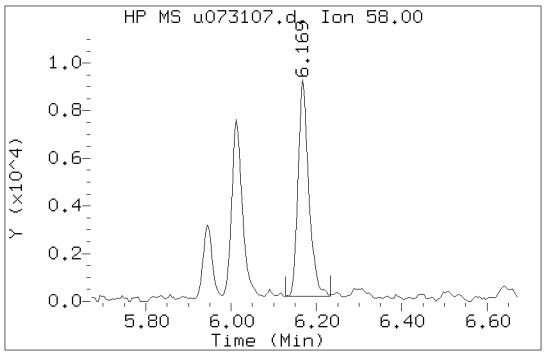
1,4-Dioxane ()

Reason Code:

BEFORE
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01-Aug-2023
21:03



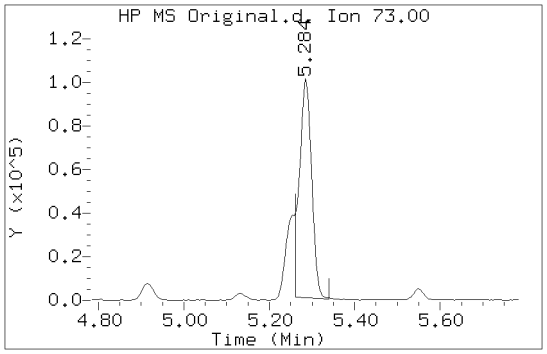
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01-Aug-2023
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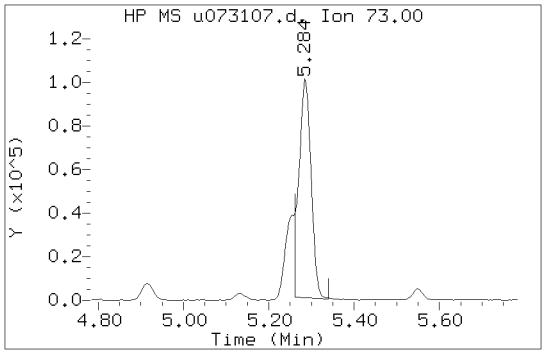
tert-Amyl methyl ether (974-05-08)

Reason Code:

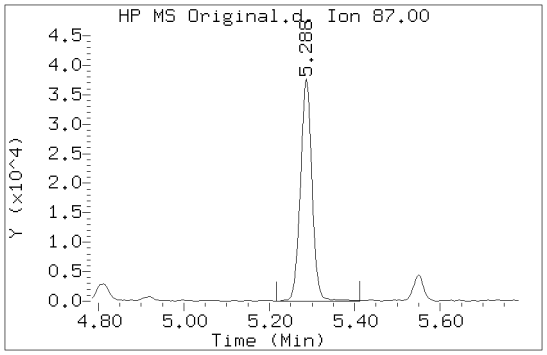
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01-Aug-2023
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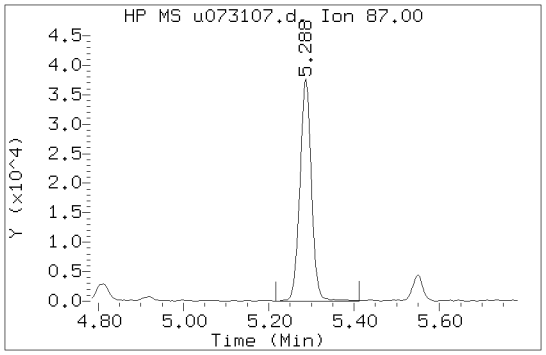
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01-Aug-2023
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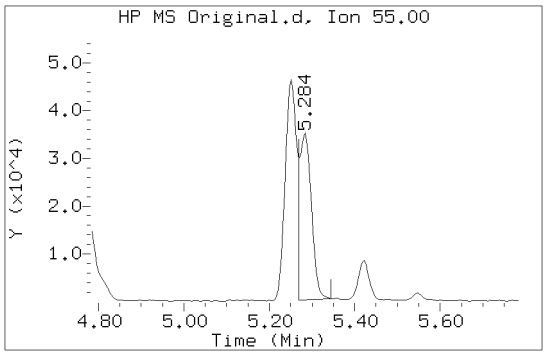
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01-Aug-2023
21:03



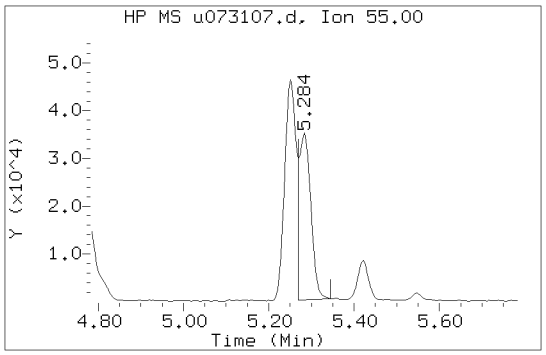
AFTER
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01-Aug-2023
21:03



BEFORE
MASS
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69222
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21:03



AFTER
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01-Aug-2023
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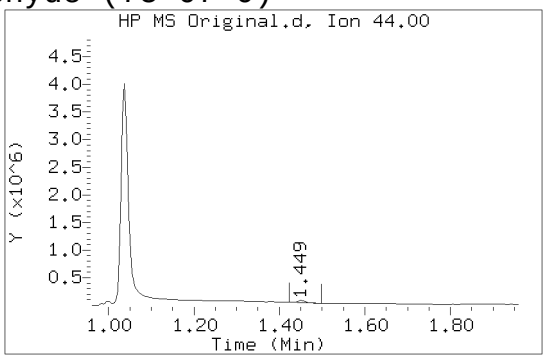


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InstruID : VOA9.i
LabSampID : VSTD020

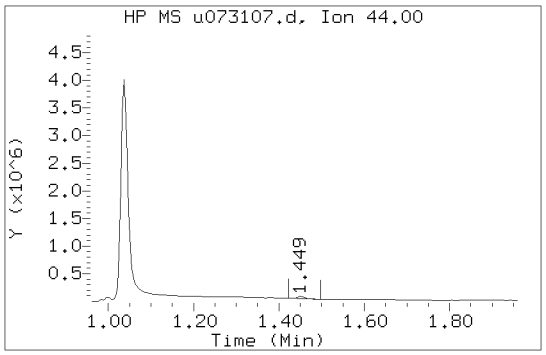
Acetaldehyde (75-07-0)

Reason Code:

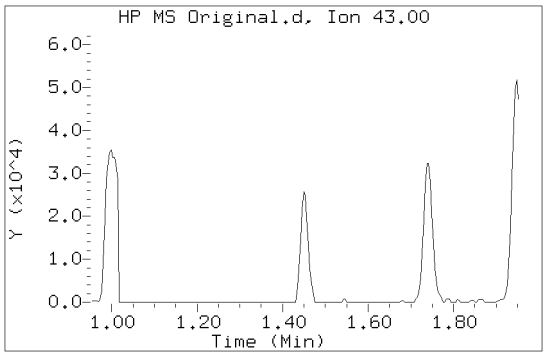
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01-Aug-2023
21:03



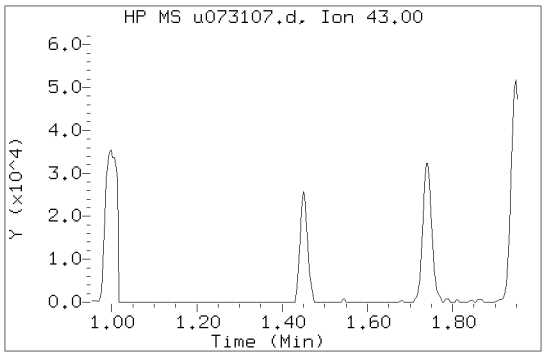
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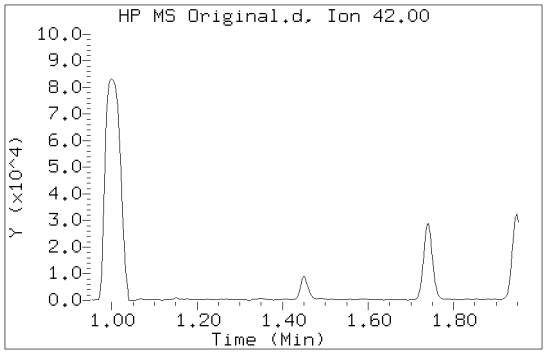
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21:03



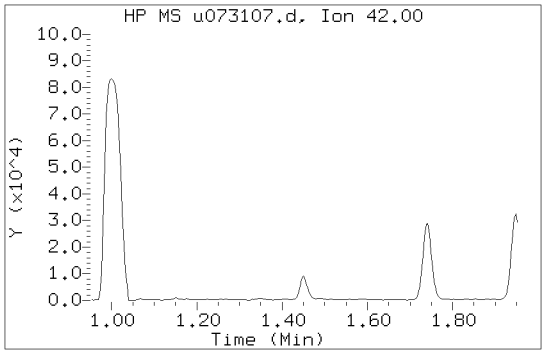
AFTER
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01-Aug-2023
21:03



BEFORE
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01-Aug-2023
21:03



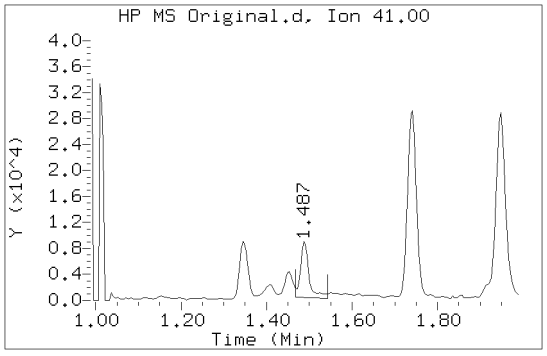
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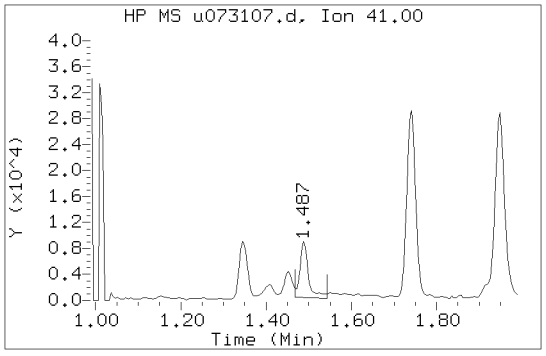
Isobutylene (115-11-7)

Reason Code:

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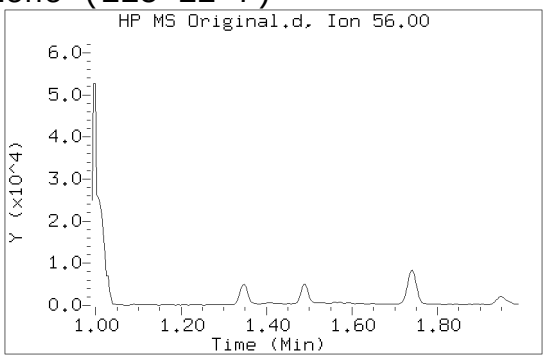


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Inj Date : 31-JUL-2023 13:44
InstruID : VOA9.i
LabSampID : VSTD020

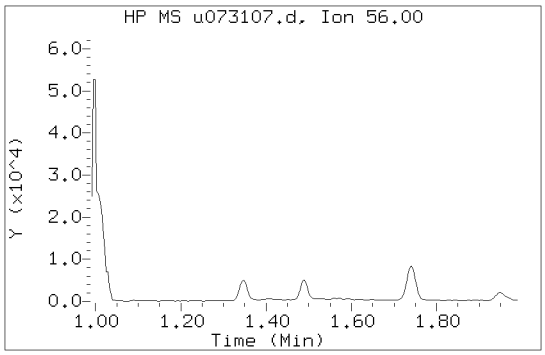
Isobutylene (115-11-7)

Reason Code:

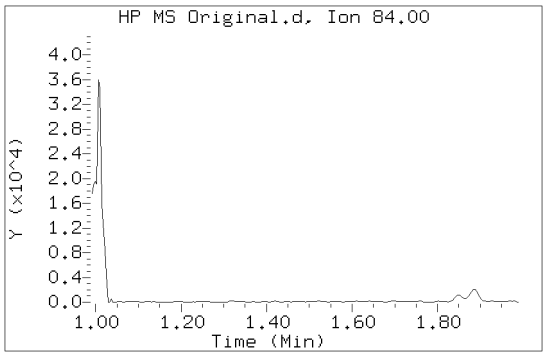
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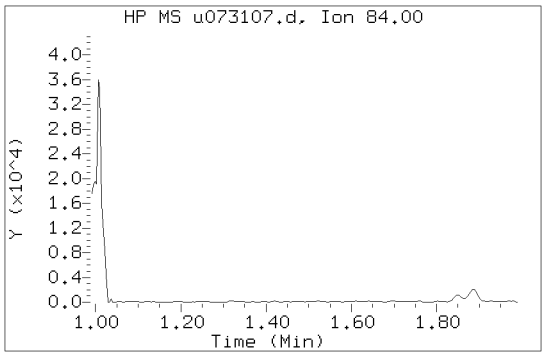
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BEFORE
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01-Aug-2023
21:03



AFTER
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AREA
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01-Aug-2023
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Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073108.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073108.D
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Inj Date : 31-JUL-2023 14:06
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V9;WATER;0;1;
Comment   :
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Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 13:44 Cal File: U073107.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.811	(1.000)	521501	50.0000	
2 Dichlorodifluoromethane	85	1.156	1.156	(0.240)	210687	50.0000	42.40
3 Chloromethane	50	1.291	1.291	(0.268)	290271	50.0000	47.40
5 Vinyl Chloride	62	1.370	1.370	(0.285)	230497	50.0000	44.89
6 Bromomethane	94	1.610	1.610	(0.335)	140100	50.0000	50.62
7 Chloroethane	64	1.693	1.693	(0.352)	140986	50.0000	43.60
8 Trichlorofluoromethane	101	1.887	1.887	(0.392)	278846	50.0000	44.00
9 Acrolein	56	1.741	1.741	(0.362)	30057	100.000	89.85
10 Acetone	43	2.401	2.401	(0.499)	169500	100.000	104.17
11 1,1-Dichloroethene	96	2.326	2.326	(0.483)	156147	50.0000	45.44
15 Iodomethane	142	2.461	2.461	(0.512)	293634	100.000	89.53
16 Acrylonitrile	53	3.061	3.061	(0.636)	164576	100.000	100.39
17 Methylene Chloride	84	2.787	2.787	(0.579)	200746	50.0000	48.08
18 Methyl tert-butyl ether	73	3.072	3.072	(0.639)	524571	50.0000	49.39
19 Carbon Disulfide	76	2.514	2.514	(0.522)	914751	100.000	91.45
20 trans-1,2-Dichloroethene	96	3.050	3.050	(0.634)	173824	50.0000	45.14
21 Vinyl Acetate	43	3.601	3.601	(0.748)	1096284	100.000	99.48
22 1,1-Dichloroethane	63	3.507	3.507	(0.729)	306506	50.0000	43.55
24 2-Butanone	43	4.264	4.264	(0.886)	184731	100.000	90.16
26 2,2-Dichloropropane	77	4.178	4.178	(0.868)	225058	50.0000	46.38

27 cis-1,2-Dichloroethene	96	4.189	4.189 (0.871)	200549	50.0000	46.66
28 Chloroform	83	4.568	4.568 (0.949)	370309	50.0000	45.21

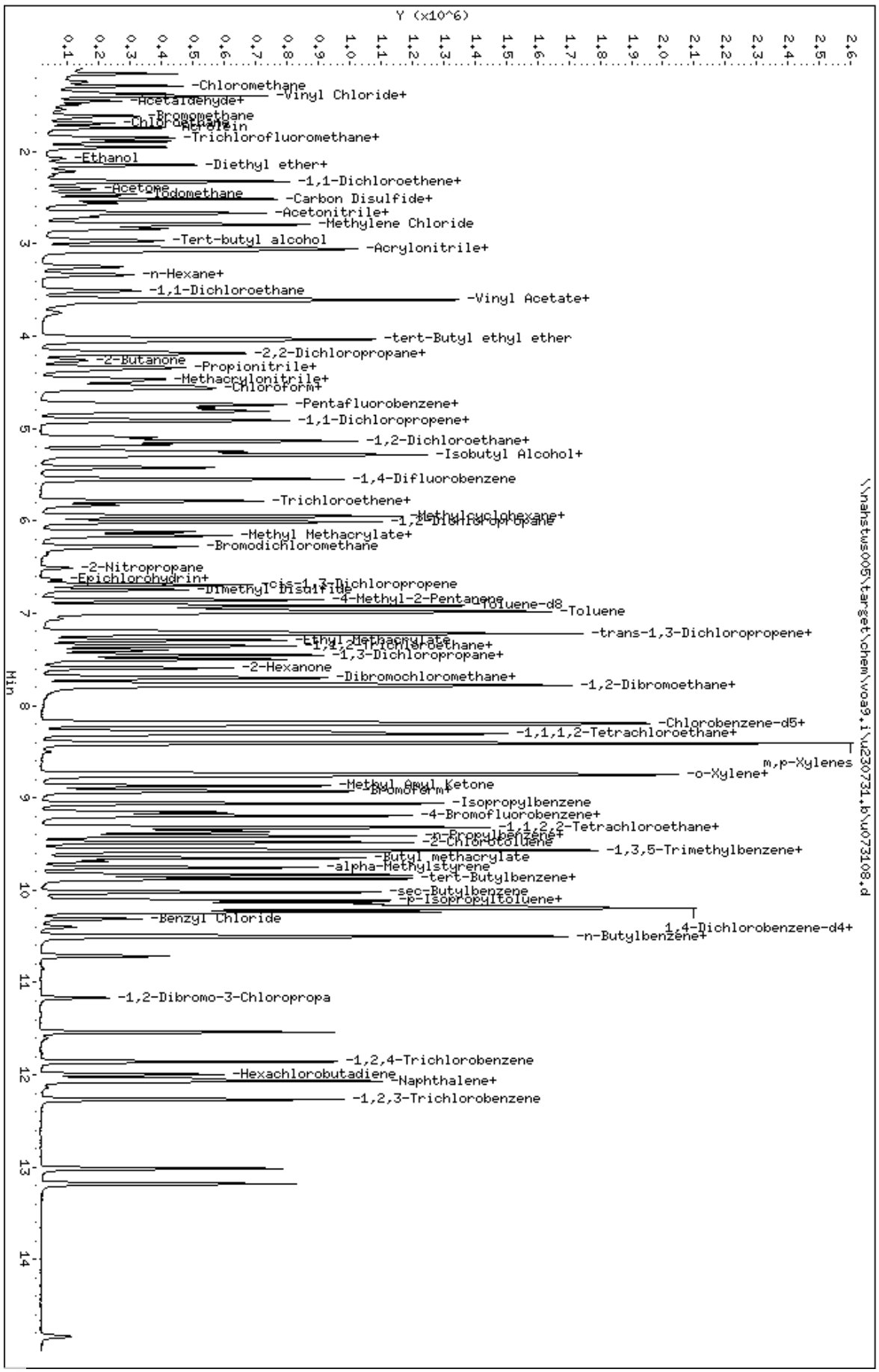
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.463	4.463	(0.928)	114734	50.0000	45.11
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	213944	50.0000	51.31
	31 1,1,1-Trichloroethane	97	4.736	4.736	(0.984)	288139	50.0000	45.22
	32 1,1-Dichloropropene	75	4.916	4.916	(0.886)	247660	50.0000	44.27
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	310322	50.0000	47.83
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	222170	50.0000	44.33
$	35 1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	242144	50.0000	53.39
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	753344	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	847314	50.0000	46.04
	38 Trichloroethene	130	5.786	5.786	(1.043)	234118	50.0000	45.01
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	279504	50.0000	47.48
	41 2-Chloroethylvinyl ether	63	6.573	6.573	(1.184)	8568	100.000	100.26(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	233383	50.0000	47.31
	44 Dibromomethane	93	6.116	6.116	(1.102)	151090	50.0000	47.69
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	534926	100.000	102.38
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	332624	50.0000	44.58
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	702205	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	812511	50.0000	49.74
	50 Toluene	91	6.978	6.978	(0.853)	923622	50.0000	48.37
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	283880	50.0000	50.04
	52 2-Hexanone	43	7.593	7.593	(0.928)	349171	100.000	100.92
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	191597	50.0000	46.85
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	400885	50.0000	47.79
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	251335	50.0000	50.08
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	200189	50.0000	43.12
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	246343	50.0000	50.07
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	157109	50.0000	39.93
	59 Chlorobenzene	112	8.208	8.208	(1.003)	620392	50.0000	45.83
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	232375	50.0000	47.10
	61 Ethylbenzene	106	8.305	8.305	(1.015)	284758	50.0000	46.47
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	695488	100.000	96.69
	63 o-Xylene	106	8.744	8.744	(1.068)	348256	50.0000	49.49
	64 Styrene	104	8.759	8.759	(1.070)	567019	50.0000	51.63
	66 Bromoform	173	8.920	8.920	(1.090)	174502	50.0000	49.77
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	789895	50.0000	46.39
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	329861	50.0000	46.28
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	329909	50.0000	51.80
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	369999	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	297386	50.0000	47.92
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	850858	50.0000	41.16
	74 Bromobenzene	156	9.317	9.317	(0.916)	282913	50.0000	46.21
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	586347	50.0000	45.34
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	597862	50.0000	45.83
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	688448	50.0000	47.24
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	551666	50.0000	45.03
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	604762	50.0000	46.18
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	678780	50.0000	48.59
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	559357	50.0000	48.64
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	455217	50.0000	44.55
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	486155	50.0000	42.94
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	474213	50.0000	38.60
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	472224	50.0000	45.05

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	46740	50.0000	45.48
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	306323	50.0000	47.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	112500	50.0000	48.22
	92 Naphthalene	128	12.065	12.065	(1.186)	769637	50.0000	45.34
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	305902	50.0000	46.46
M	94 1,2-Dichloroethylene (total)	96				374373	100.000	
M	95 Xylenes (total)	106				1043744	150.000	
	135 1,4-Dioxane	88	6.168	6.168	(1.282)	69347	1000.00	927.44(M)
	141 Cyclohexane	56	4.778	4.778	(0.993)	243118	50.0000	41.47
	138 Freon TF	101	2.326	2.326	(0.483)	133548	50.0000	47.95
	140 1,3-Butadiene	54	1.396	1.396	(0.290)	190601	50.0000	45.90
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	564625	50.0000	51.45
	146 Methyl Acetate	43	2.708	2.708	(0.563)	172678	50.0000	46.14
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.616)	427118	1000.00	974.10
	149 Isopropyl Alcohol	45	2.558	2.558	(0.532)	271031	1000.00	940.42

QC Flag Legend

M - Compound response manually integrated.



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Column phase: DB624

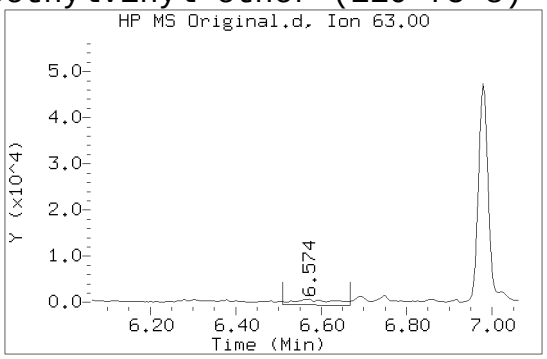
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Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 14:06
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LabSampID : VSTD050

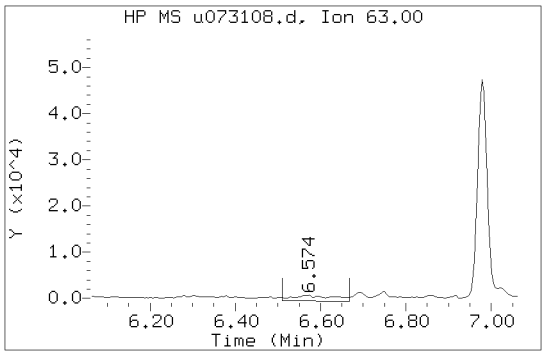
2-Chloroethylvinyl ether (110-75-8)

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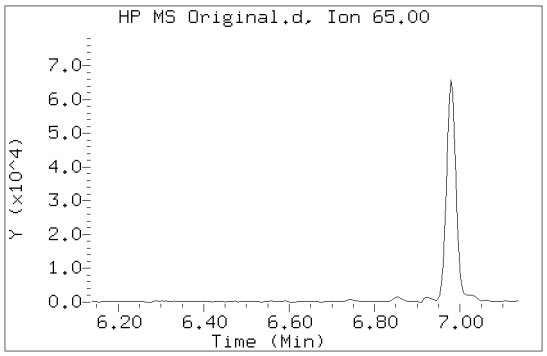
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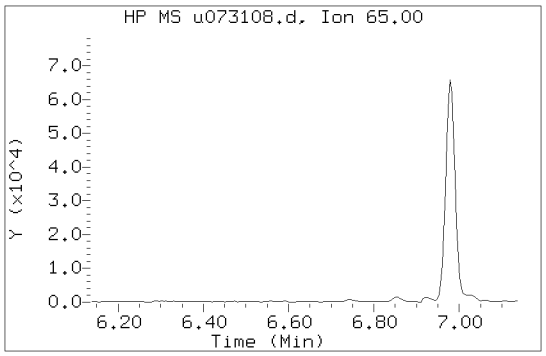
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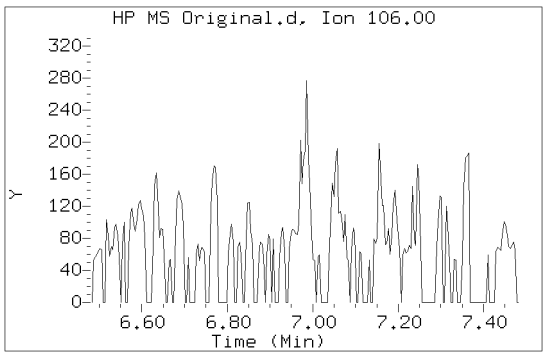
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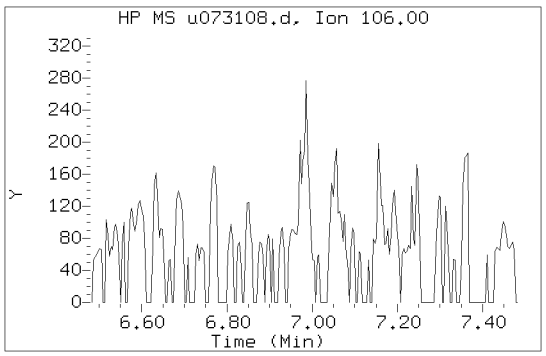
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BEFORE
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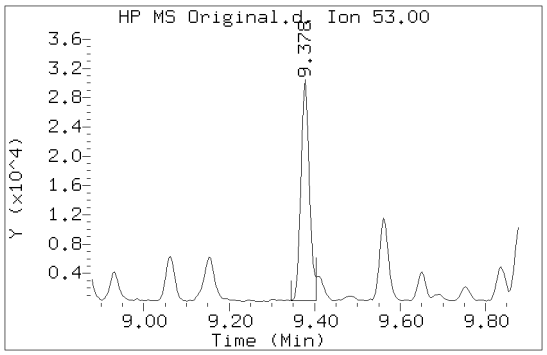
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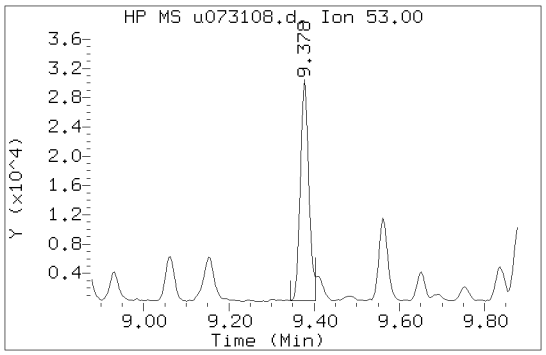
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

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01-Aug-2023
21:07



AFTER
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01-Aug-2023
21:07



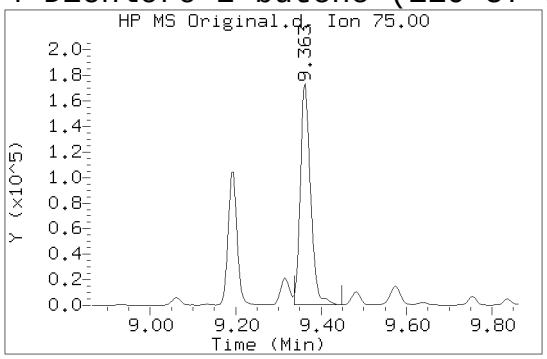
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Inj Date : 31-JUL-2023 14:06
InstruID : VOA9.i
LabSampID : VSTD050

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

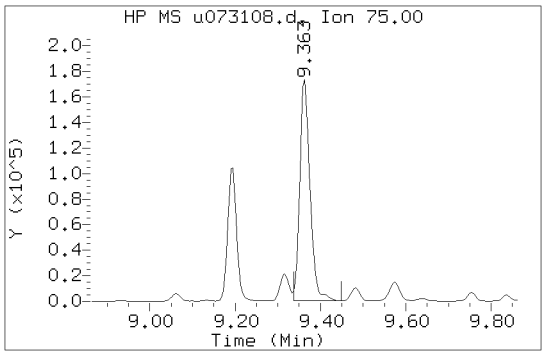
BEFORE

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01-Aug-2023
21:07



AFTER

MASS
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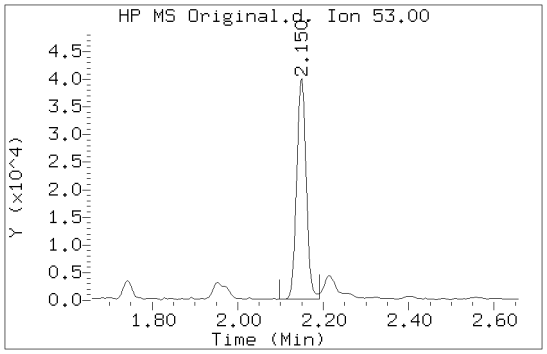


Chloroprene (126-99-8)

Reason Code:

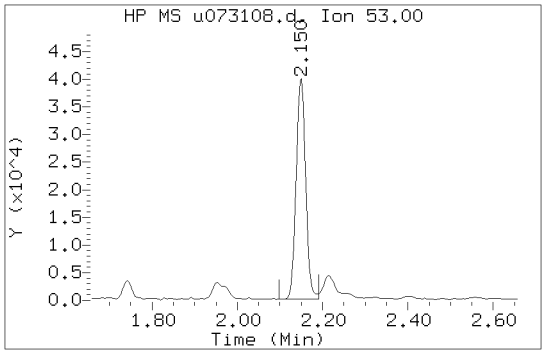
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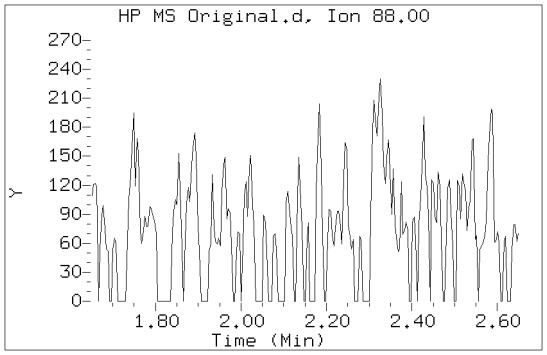
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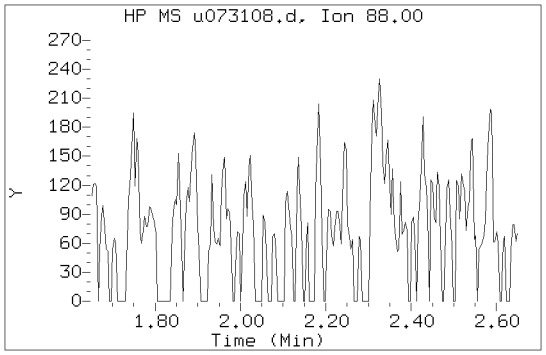
BEFORE

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01-Aug-2023
21:07



AFTER

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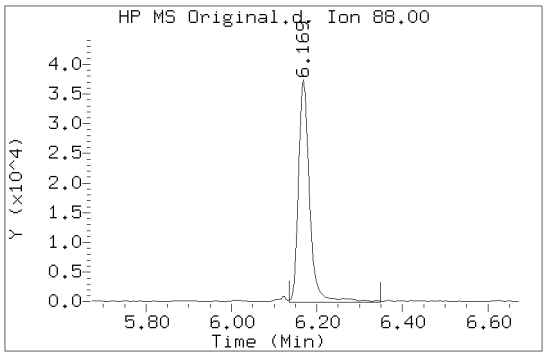


1,4-Dioxane ()

Reason Code:

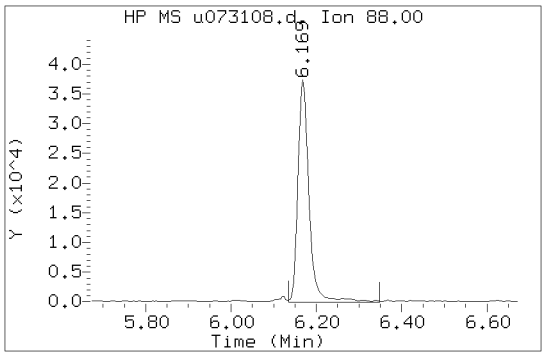
BEFORE

MASS
88
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69347
HEIGHT
37380
01-Aug-2023
21:07



AFTER

MASS
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AREA
69347
HEIGHT
37380
01-Aug-2023
21:07

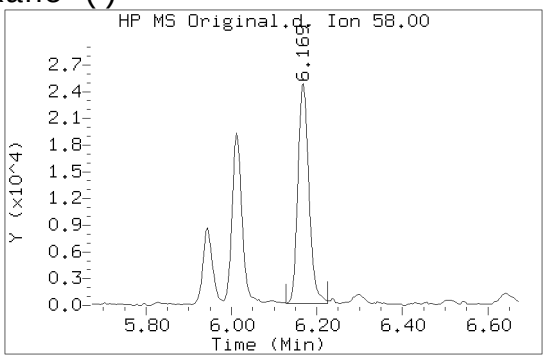


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InstruID : VOA9.i
LabSampID : VSTD050

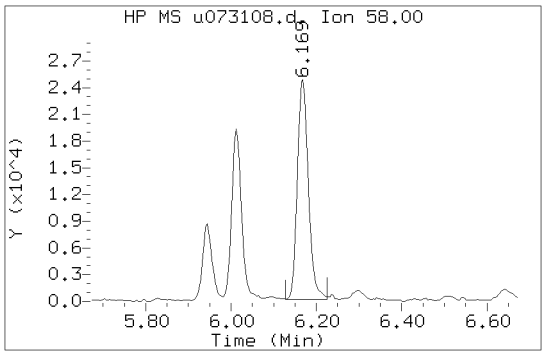
1,4-Dioxane ()

Reason Code:

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01-Aug-2023
21:07



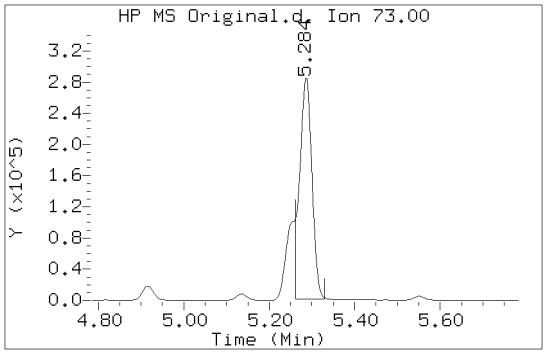
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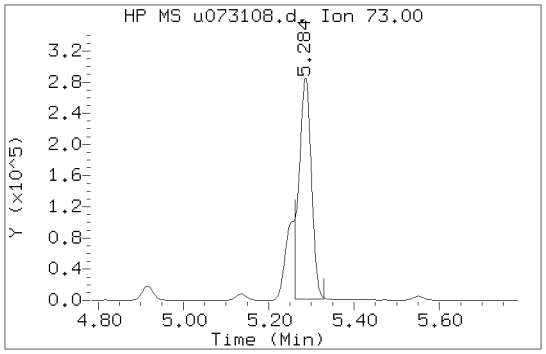
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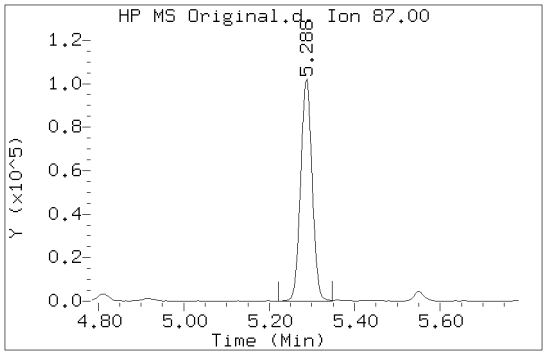
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HEIGHT
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01-Aug-2023
21:07



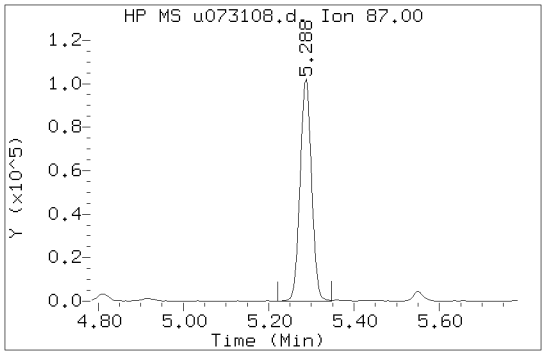
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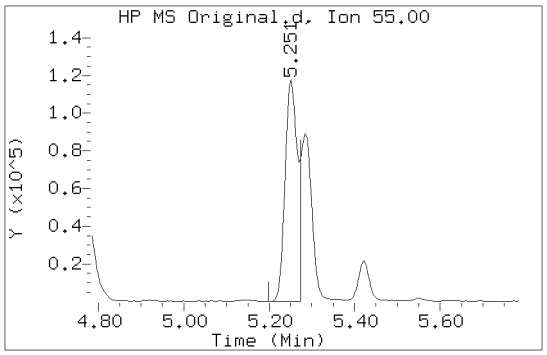
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87
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195353
HEIGHT
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01-Aug-2023
21:07



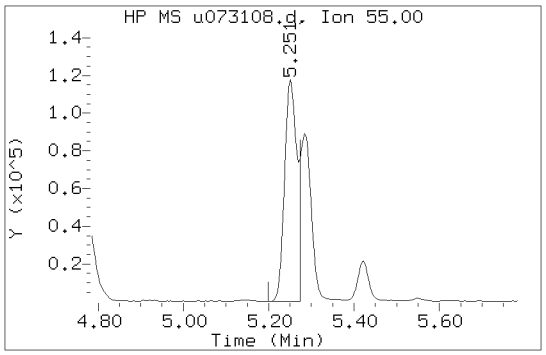
AFTER
MASS
87
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HEIGHT
102111
01-Aug-2023
21:07



BEFORE
MASS
55
AREA
243538
HEIGHT
117540
01-Aug-2023
21:07



AFTER
MASS
55
AREA
243538
HEIGHT
117540
01-Aug-2023
21:07



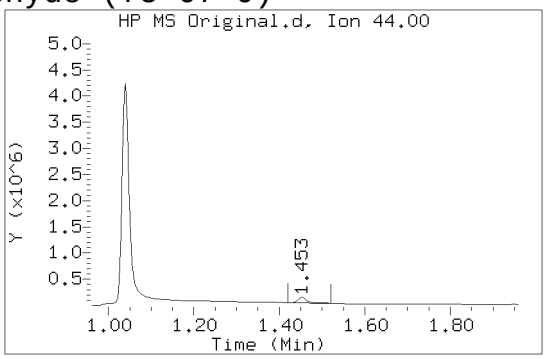
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Inj Date : 31-JUL-2023 14:06
InstruID : VOA9.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

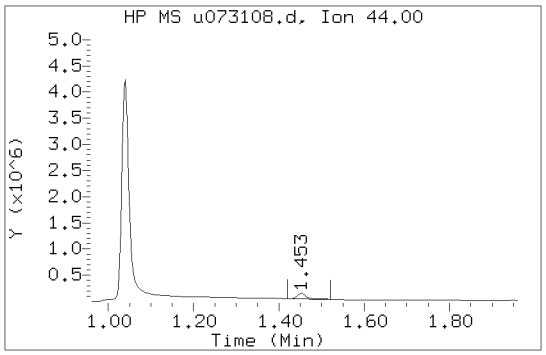
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HEIGHT
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01-Aug-2023
21:07



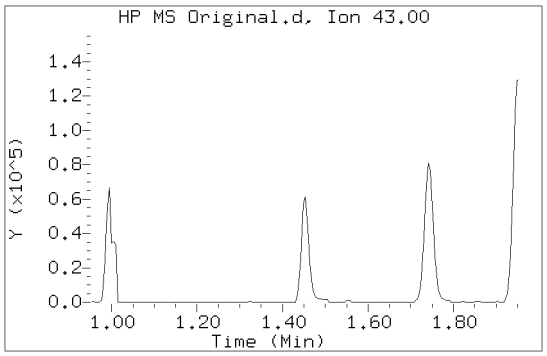
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01-Aug-2023
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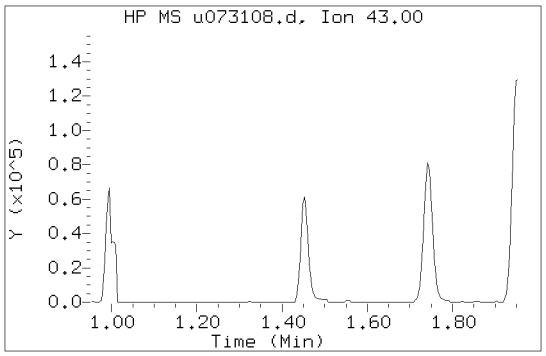
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01-Aug-2023
21:07



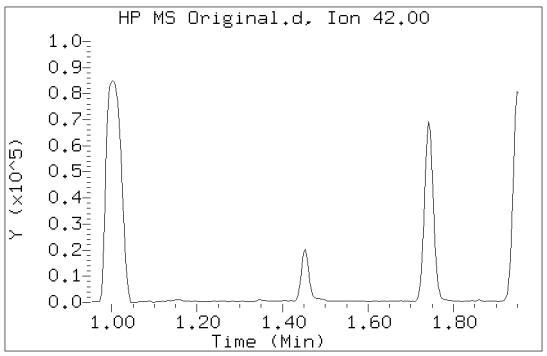
AFTER

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01-Aug-2023
21:07



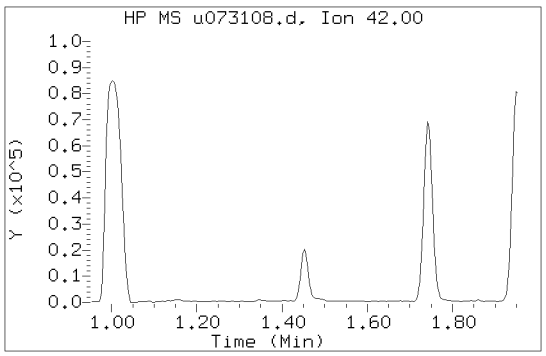
BEFORE

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42
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HEIGHT
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01-Aug-2023
21:07



AFTER

MASS
42
AREA
0
HEIGHT
0
01-Aug-2023
21:07

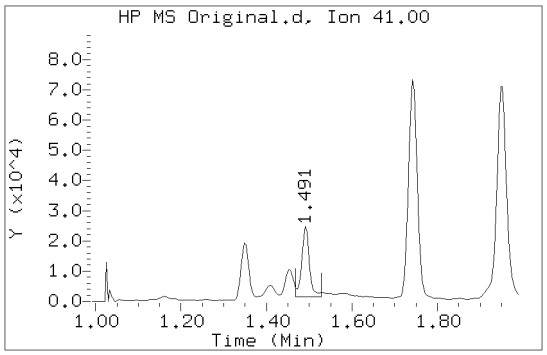


Isobutylene (115-11-7)

Reason Code:

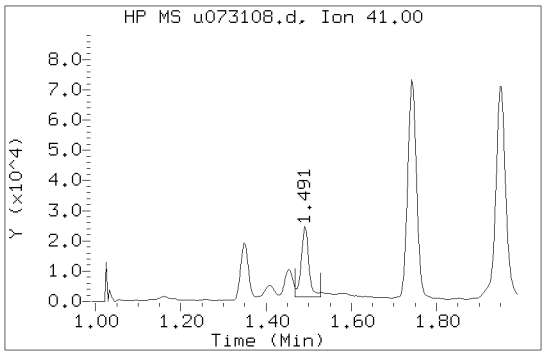
BEFORE

MASS
41
AREA
29766
HEIGHT
23313
01-Aug-2023
21:07



AFTER

MASS
41
AREA
29766
HEIGHT
23313
01-Aug-2023
21:07

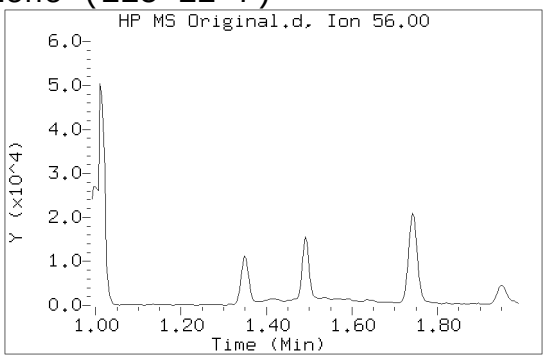


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Inj Date : 31-JUL-2023 14:06
InstruID : VOA9.i
LabSampID : VSTD050

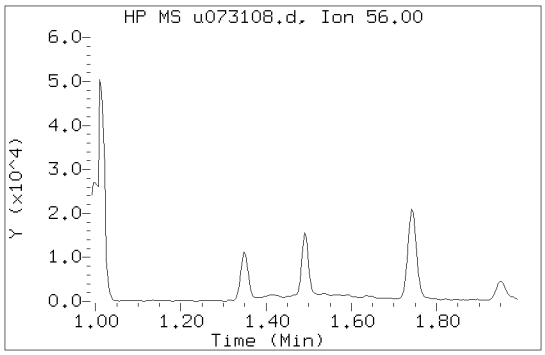
Isobutylene (115-11-7)

Reason Code:

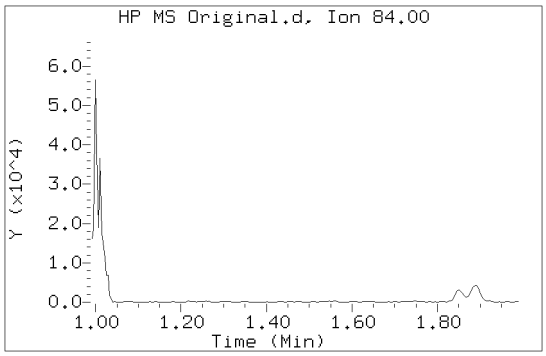
BEFORE
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HEIGHT
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01-Aug-2023
21:07



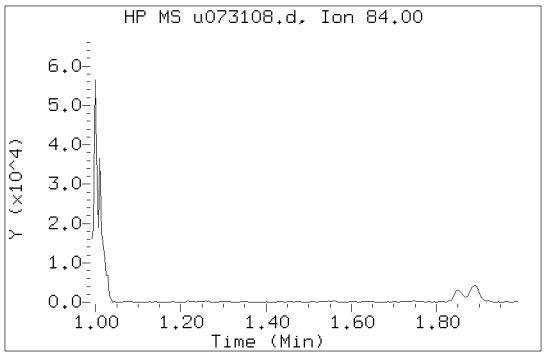
AFTER
MASS
56
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HEIGHT
0
01-Aug-2023
21:07



BEFORE
MASS
84
AREA
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HEIGHT
0
01-Aug-2023
21:07



AFTER
MASS
84
AREA
0
HEIGHT
0
01-Aug-2023
21:07



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073109.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073109.D
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Inj Date : 31-JUL-2023 14:28
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.811	4.811	(1.000)	531119	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	539886	100.000	104.78
3	Chloromethane	50	1.291	1.291	(0.268)	647562	100.000	104.26
5	Vinyl Chloride	62	1.374	1.374	(0.286)	556620	100.000	106.44
6	Bromomethane	94	1.610	1.610	(0.335)	279477	100.000	100.74
7	Chloroethane	64	1.693	1.693	(0.352)	326908	100.000	99.27
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	708047	100.000	109.70
9	Acrolein	56	1.745	1.745	(0.363)	72803	200.000	213.70
10	Acetone	43	2.405	2.405	(0.500)	334973	200.000	209.83(A)
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	375202	100.000	107.22
15	Iodomethane	142	2.465	2.465	(0.512)	790175	200.000	209.83
16	Acrylonitrile	53	3.061	3.061	(0.636)	326846	200.000	195.77
17	Methylene Chloride	84	2.791	2.791	(0.580)	426614	100.000	100.55
18	Methyl tert-butyl ether	73	3.076	3.076	(0.639)	1061414	100.000	98.13
19	Carbon Disulfide	76	2.517	2.517	(0.523)	2172250	200.000	213.23
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	387474	100.000	98.81
21	Vinyl Acetate	43	3.604	3.604	(0.749)	2321009	200.000	206.81
22	1,1-Dichloroethane	63	3.511	3.511	(0.730)	686592	100.000	95.79
24	2-Butanone	43	4.264	4.264	(0.886)	378901	200.000	181.59
26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	526083	100.000	106.45

27	cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	444452	100.000	101.53
28	Chloroform	83	4.572	4.572 (0.950)	809862	100.000	97.09

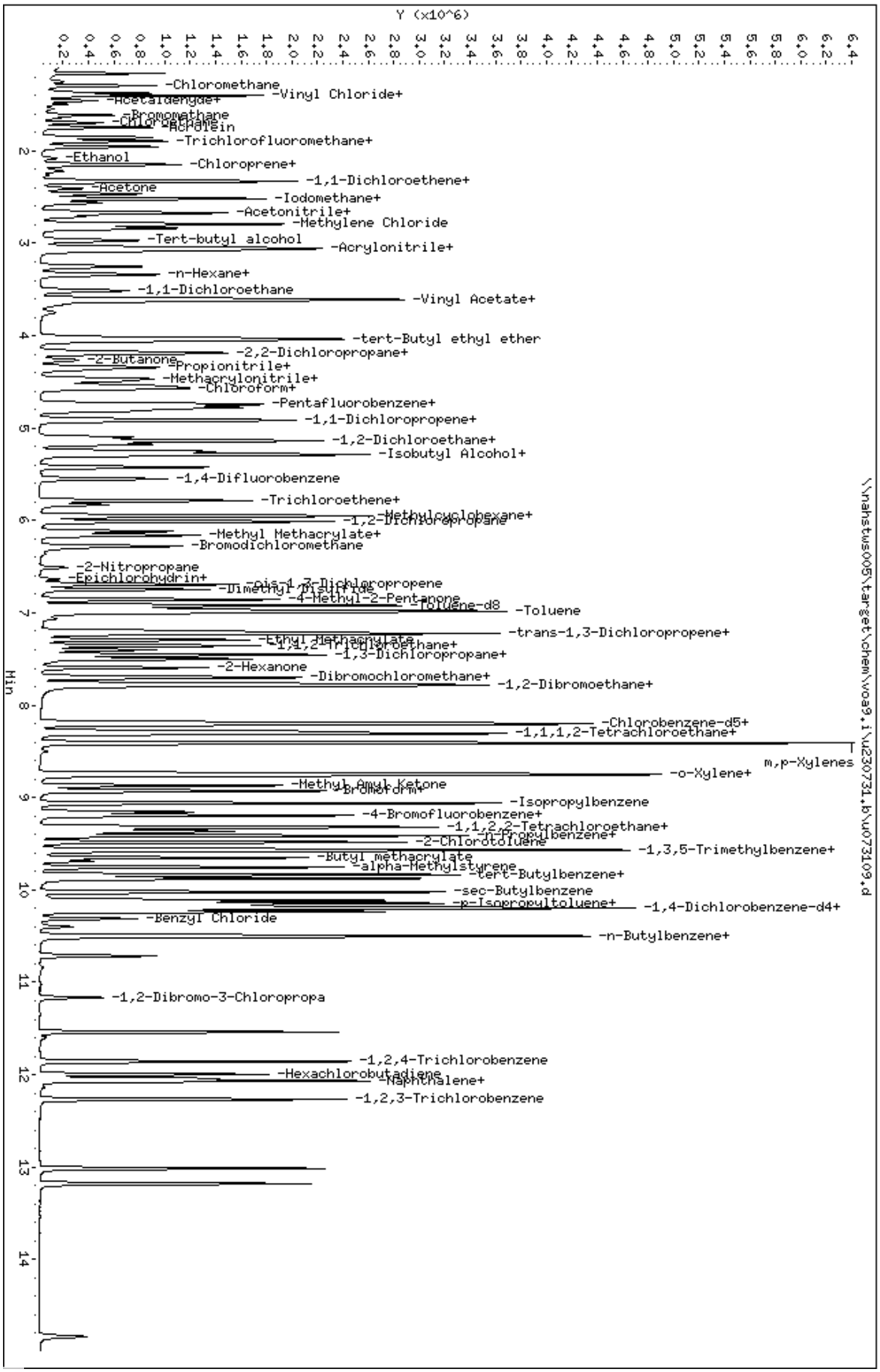
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
29	Bromochloromethane	128	4.467	4.467	(0.928)	251900	100.000	97.25
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.987)	432647	100.000	102.88
31	1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	692131	100.000	106.65
32	1,1-Dichloropropene	75	4.916	4.916	(0.886)	621122	100.000	108.81
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	653640	100.000	98.74
34	Carbon Tetrachloride	117	4.909	4.909	(0.885)	590616	100.000	115.50
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	469501	100.000	102.86
* 36	1,4-Difluorobenzene	114	5.550	5.550	(1.000)	768682	50.0000	
37	Benzene	78	5.138	5.138	(0.926)	1881235	100.000	100.18
38	Trichloroethene	130	5.786	5.786	(1.043)	546012	100.000	102.88
39	Bromodichloromethane	83	6.277	6.277	(1.131)	626277	100.000	104.28
41	2-Chloroethylvinyl ether	63	6.573	6.573	(1.184)	17476	200.000	201.52(M)
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	503188	100.000	99.98
44	Dibromomethane	93	6.120	6.120	(1.103)	317210	100.000	98.13
45	4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	1113382	200.000	204.85
46	cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	774336	100.000	98.89
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	730455	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	1702517	100.000	100.20
50	Toluene	91	6.978	6.978	(0.853)	2103575	100.000	105.92
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	657662	100.000	113.61
52	2-Hexanone	43	7.593	7.593	(0.928)	745592	200.000	207.16
53	1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	399622	100.000	93.95
54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	852281	100.000	97.67
55	Dibromochloromethane	129	7.690	7.690	(0.940)	562633	100.000	107.78
56	Tetrachloroethene	164	7.458	7.458	(0.911)	508894	100.000	105.39
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	511063	100.000	99.87
58	1-Chlorohexane	55	8.196	8.196	(1.477)	456782	100.000	113.79
59	Chlorobenzene	112	8.208	8.208	(1.003)	1400796	100.000	99.49
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	524704	100.000	102.25
61	Ethylbenzene	106	8.305	8.305	(1.015)	707960	100.000	111.08
62	m,p-Xylenes	106	8.410	8.410	(1.027)	1748509	200.000	233.68
63	o-Xylene	106	8.748	8.748	(1.069)	842626	100.000	115.11
64	Styrene	104	8.759	8.759	(1.070)	1350547	100.000	118.23
66	Bromoform	173	8.916	8.916	(1.089)	397643	100.000	109.03
67	Isopropylbenzene	105	9.062	9.062	(1.107)	2157581	100.000	121.81
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	678033	100.000	91.98
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	681158	100.000	104.18
* 70	1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	382676	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	649935	100.000	101.27
73	n-Propylbenzene	91	9.411	9.411	(0.925)	2371517	100.000	108.15
74	Bromobenzene	156	9.317	9.317	(0.916)	640155	100.000	101.11
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	1580368	100.000	118.16
76	2-Chlorotoluene	91	9.482	9.482	(0.932)	1466545	100.000	108.70
77	4-Chlorotoluene	91	9.576	9.576	(0.941)	1658605	100.000	110.06
78	tert-Butylbenzene	119	9.838	9.838	(0.967)	1531790	100.000	120.89
79	1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	1537488	100.000	113.52
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	2006353	100.000	100.11(M)
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	1676245	100.000	100.10
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1093115	100.000	103.45
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1130176	100.000	96.52
87	n-Butylbenzene	91	10.491	10.491	(1.031)	1404287	100.000	106.06
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	1085919	100.000	100.16

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	111083	100.000	104.52
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	779707	100.000	116.91

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	351435	100.000	100.12
	92 Naphthalene	128	12.065	12.065	(1.186)	1846543	100.000	103.09
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	758679	100.000	111.43
M	94 1,2-Dichloroethylene (total)	96				831926	200.000	
M	95 Xylenes (total)	106				2591135	300.000	
	135 1,4-Dioxane	88	6.168	6.168	(1.282)	133163	2000.00	1748.66
	141 Cyclohexane	56	4.778	4.778	(0.993)	724781	100.000	121.41
	138 Freon TF	101	2.330	2.330	(0.484)	376621	100.000	100.17
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	471706	100.000	111.54
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	1231847	100.000	110.02(A)
	146 Methyl Acetate	43	2.708	2.708	(0.563)	348427	100.000	91.42
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.617)	876760	2000.00	1966.54
	149 Isopropyl Alcohol	45	2.562	2.562	(0.533)	542945	2000.00	1849.80

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\woa9,i\u230731,b\u073109,d
Date : 31-JUL-2023 14:28
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

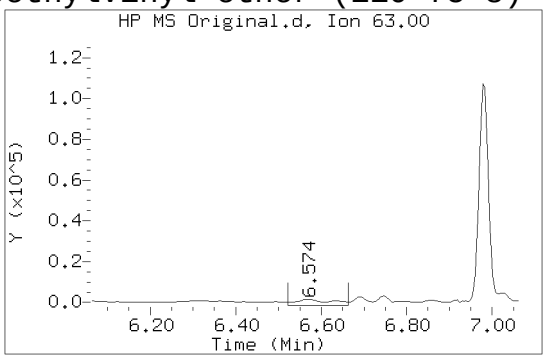
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Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 14:28
InstruID : VOA9.i
LabSampID : VSTD100

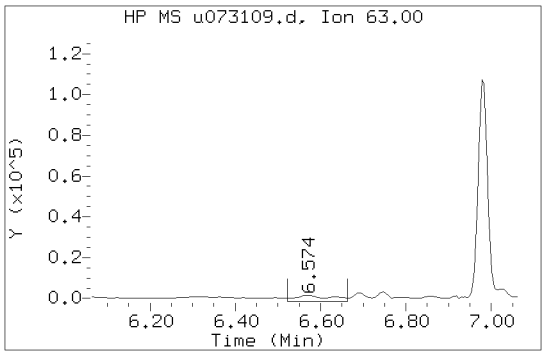
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

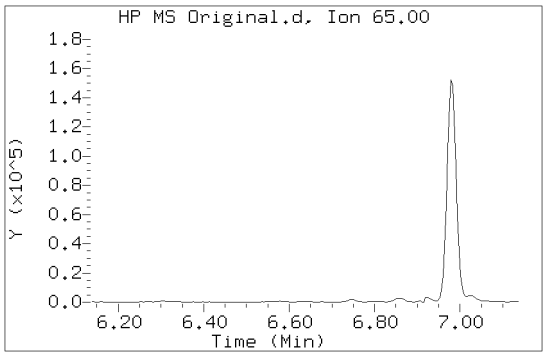
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HEIGHT
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01-Aug-2023
21:04



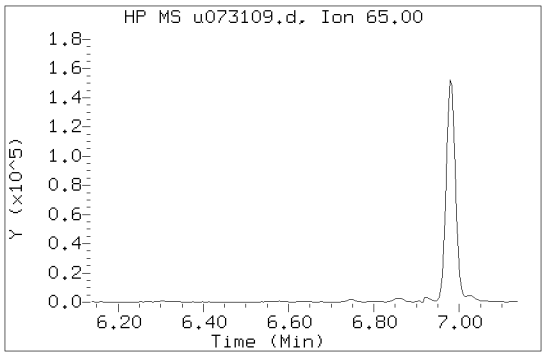
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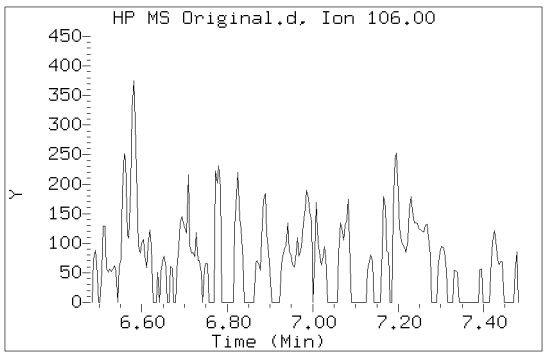
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01-Aug-2023
21:04



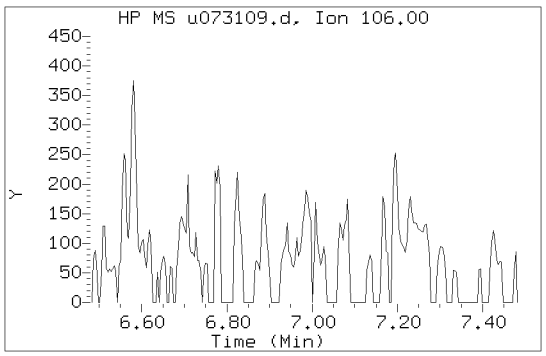
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01-Aug-2023
21:04



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HEIGHT
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01-Aug-2023
21:04



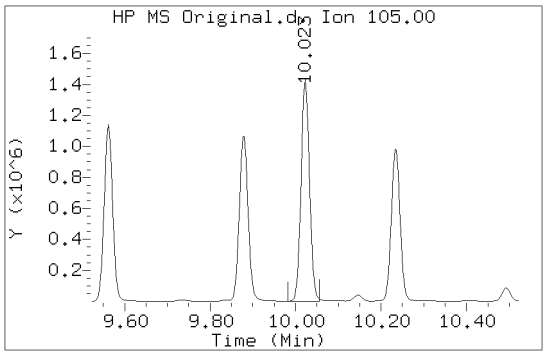
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01-Aug-2023
21:04



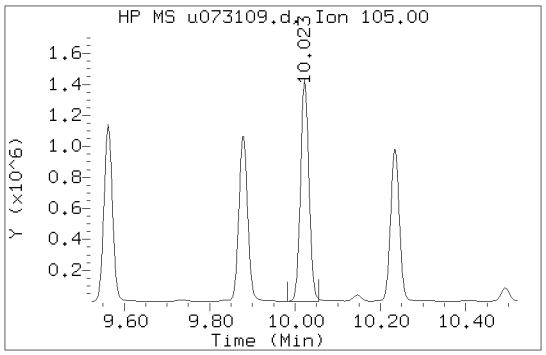
sec-Butylbenzene (135-98-8)

Reason Code:

BEFORE
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AREA
2006353
HEIGHT
1429206
01-Aug-2023
21:04



AFTER
MASS
105
AREA
2006353
HEIGHT
1429206
01-Aug-2023
21:04



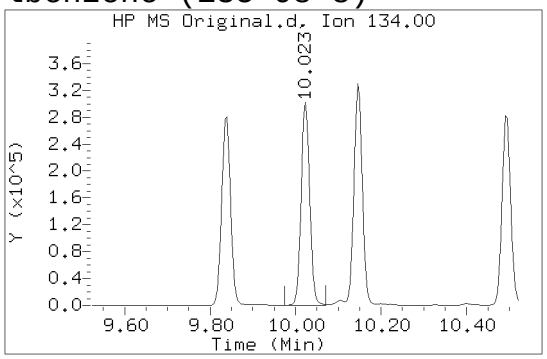
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Inj Date : 31-JUL-2023 14:28
InstruID : VOA9.i
LabSampID : VSTD100

sec-Butylbenzene (135-98-8)

Reason Code:

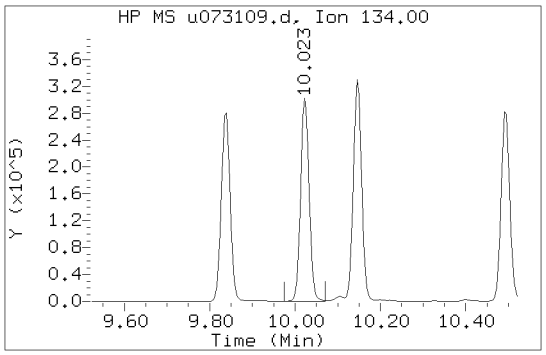
BEFORE

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HEIGHT
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01-Aug-2023
21:04



AFTER

MASS
134
AREA
428023
HEIGHT
302690
01-Aug-2023
21:04

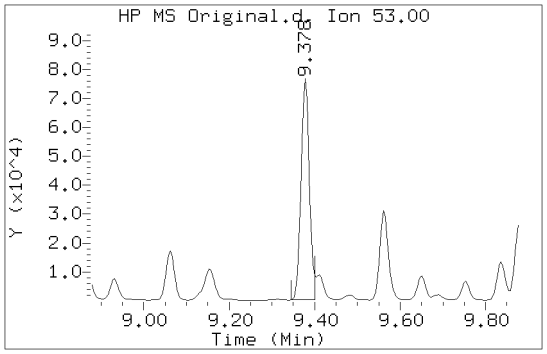


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

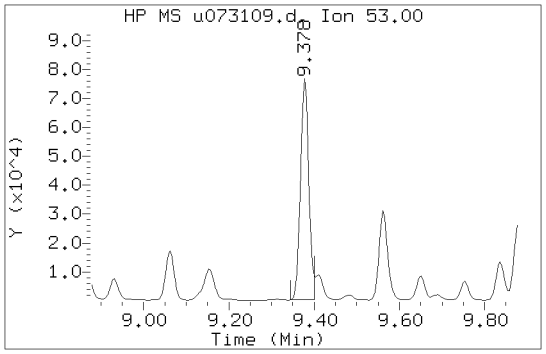
BEFORE

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53
AREA
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HEIGHT
76514
01-Aug-2023
21:04



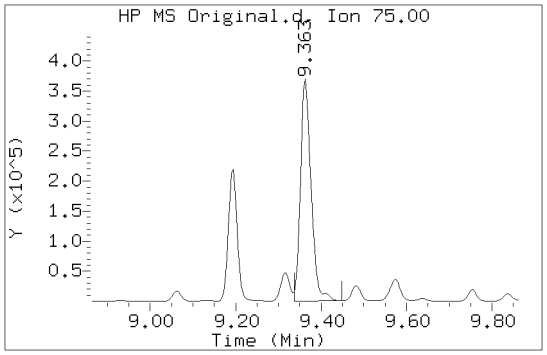
AFTER

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HEIGHT
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01-Aug-2023
21:04



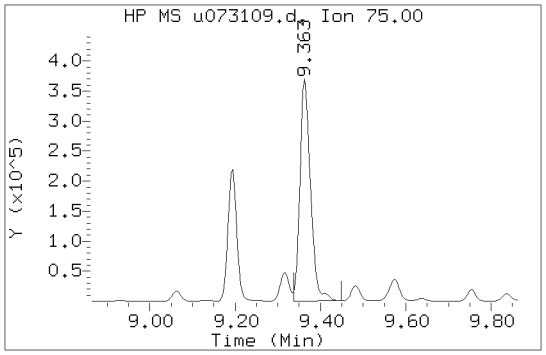
BEFORE

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647965
HEIGHT
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01-Aug-2023
21:04



AFTER

MASS
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AREA
647965
HEIGHT
369522
01-Aug-2023
21:04

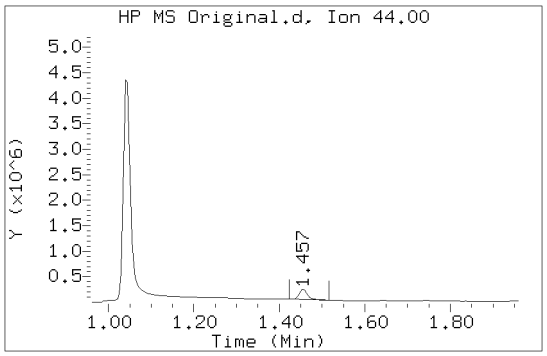


Acetaldehyde (75-07-0)

Reason Code:

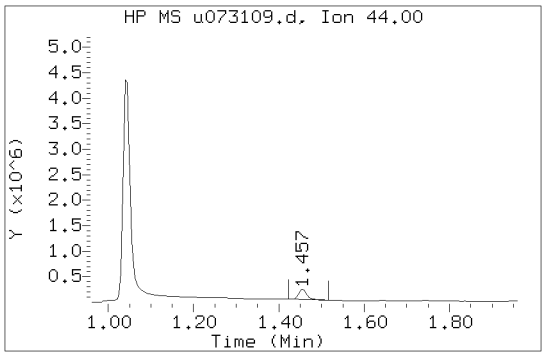
BEFORE

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HEIGHT
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01-Aug-2023
21:04



AFTER

MASS
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AREA
275850
HEIGHT
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01-Aug-2023
21:04

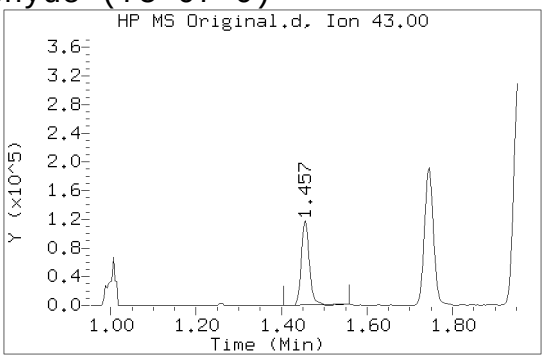


Data File : \\nahstws005\target\chem\voa9.i\u230731.b\u073109.d
Inj Date : 31-JUL-2023 14:28
InstruID : VOA9.i
LabSampID : VSTD100

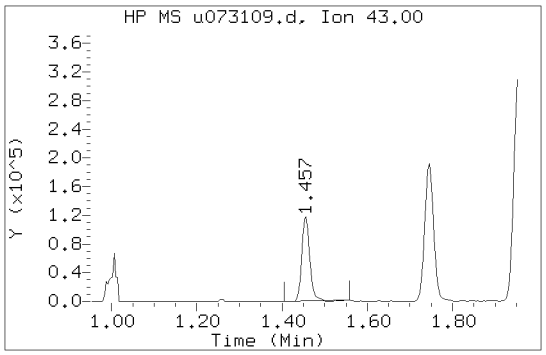
Acetaldehyde (75-07-0)

Reason Code:

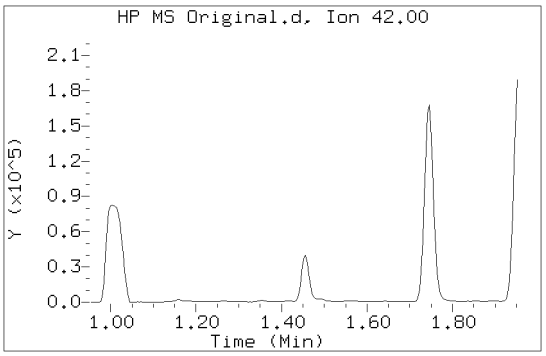
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AREA
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HEIGHT
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01-Aug-2023
21:04



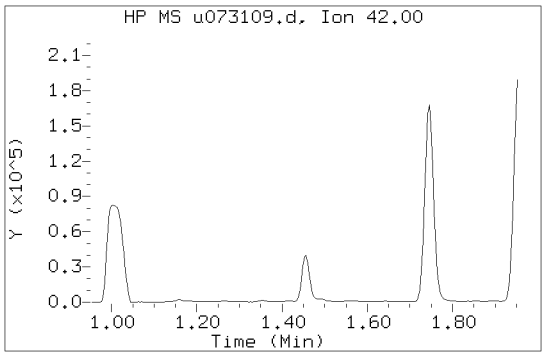
AFTER
MASS
43
AREA
153015
HEIGHT
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01-Aug-2023
21:04



BEFORE
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AREA
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HEIGHT
0
01-Aug-2023
21:04



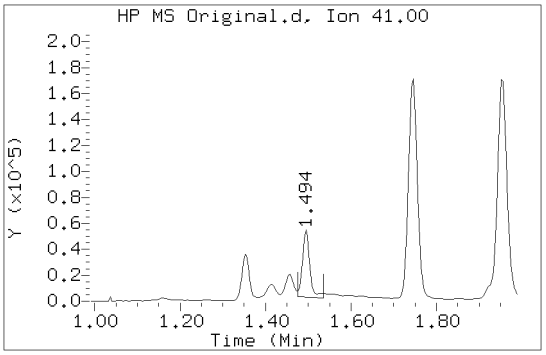
AFTER
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01-Aug-2023
21:04



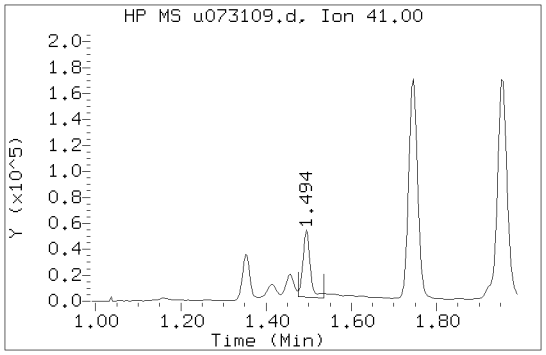
Isobutylene (115-11-7)

Reason Code:

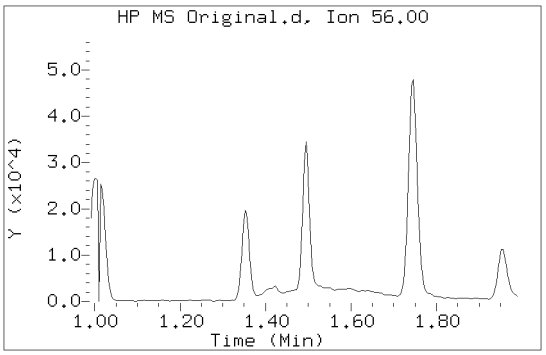
BEFORE
MASS
41
AREA
64134
HEIGHT
51862
01-Aug-2023
21:04



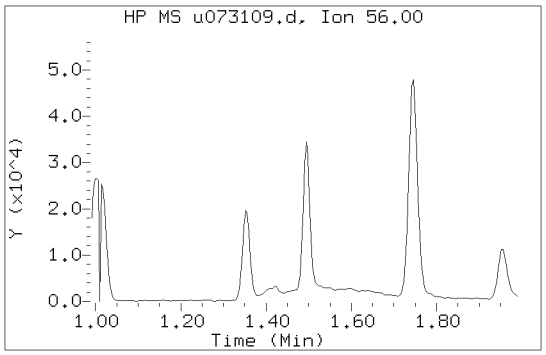
AFTER
MASS
41
AREA
64134
HEIGHT
51862
01-Aug-2023
21:04



BEFORE
MASS
56
AREA
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01-Aug-2023
21:04



AFTER
MASS
56
AREA
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HEIGHT
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01-Aug-2023
21:04



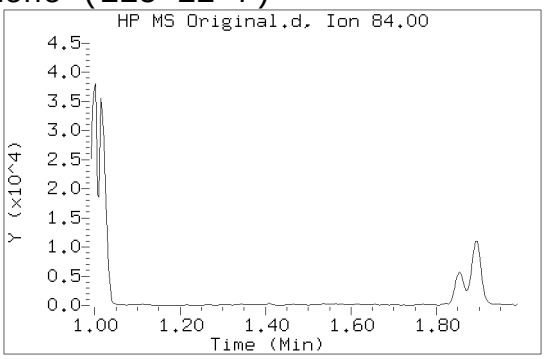
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Inj Date : 31-JUL-2023 14:28
InstruID : VOA9.i
LabSampID : VSTD100

Isobutylene (115-11-7)

Reason Code:

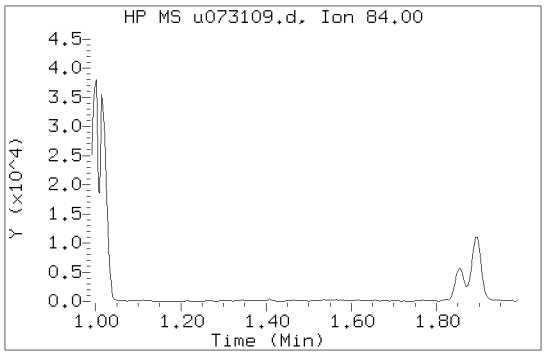
BEFORE

MASS
84
AREA
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HEIGHT
0
01-Aug-2023
21:04



AFTER

MASS
84
AREA
0
HEIGHT
0
01-Aug-2023
21:04



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073110.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 31-JUL-2023 14:51
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V9;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:28 Cal File: U073109.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.811	(1.000)	557237	50.0000	
2 Dichlorodifluoromethane	85	1.157	1.157	(0.240)	807250	150.000	148.79
3 Chloromethane	50	1.288	1.288	(0.268)	961975	150.000	147.77
5 Vinyl Chloride	62	1.366	1.366	(0.284)	860938	150.000	156.92
6 Bromomethane	94	1.599	1.599	(0.332)	430983	150.000	148.84
7 Chloroethane	64	1.685	1.685	(0.350)	507306	150.000	146.83
8 Trichlorofluoromethane	101	1.887	1.887	(0.392)	1063202	150.000	157.01
9 Acrolein	56	1.738	1.738	(0.361)	119190	300.000	333.46
10 Acetone	43	2.401	2.401	(0.499)	501220	300.000	302.73(A)
11 1,1-Dichloroethene	96	2.322	2.322	(0.483)	590988	150.000	160.97
15 Iodomethane	142	2.457	2.457	(0.511)	1298909	300.000	296.63
16 Acrylonitrile	53	3.057	3.057	(0.635)	529815	300.000	302.48
17 Methylene Chloride	84	2.787	2.787	(0.579)	668149	150.000	150.20
18 Methyl tert-butyl ether	73	3.072	3.072	(0.639)	1727226	150.000	152.21
19 Carbon Disulfide	76	2.510	2.510	(0.522)	3392907	300.000	317.45
20 trans-1,2-Dichloroethene	96	3.050	3.050	(0.634)	617223	150.000	150.02
21 Vinyl Acetate	43	3.601	3.601	(0.748)	3717826	300.000	315.75
22 1,1-Dichloroethane	63	3.507	3.507	(0.729)	1090457	150.000	145.00
24 2-Butanone	43	4.260	4.260	(0.885)	600335	300.000	274.23
26 2,2-Dichloropropane	77	4.174	4.174	(0.868)	826727	150.000	159.44

27	cis-1,2-Dichloroethene	96	4.189	4.189 (0.871)	694795	150.000	151.29
28	Chloroform	83	4.568	4.568 (0.949)	1267508	150.000	144.83

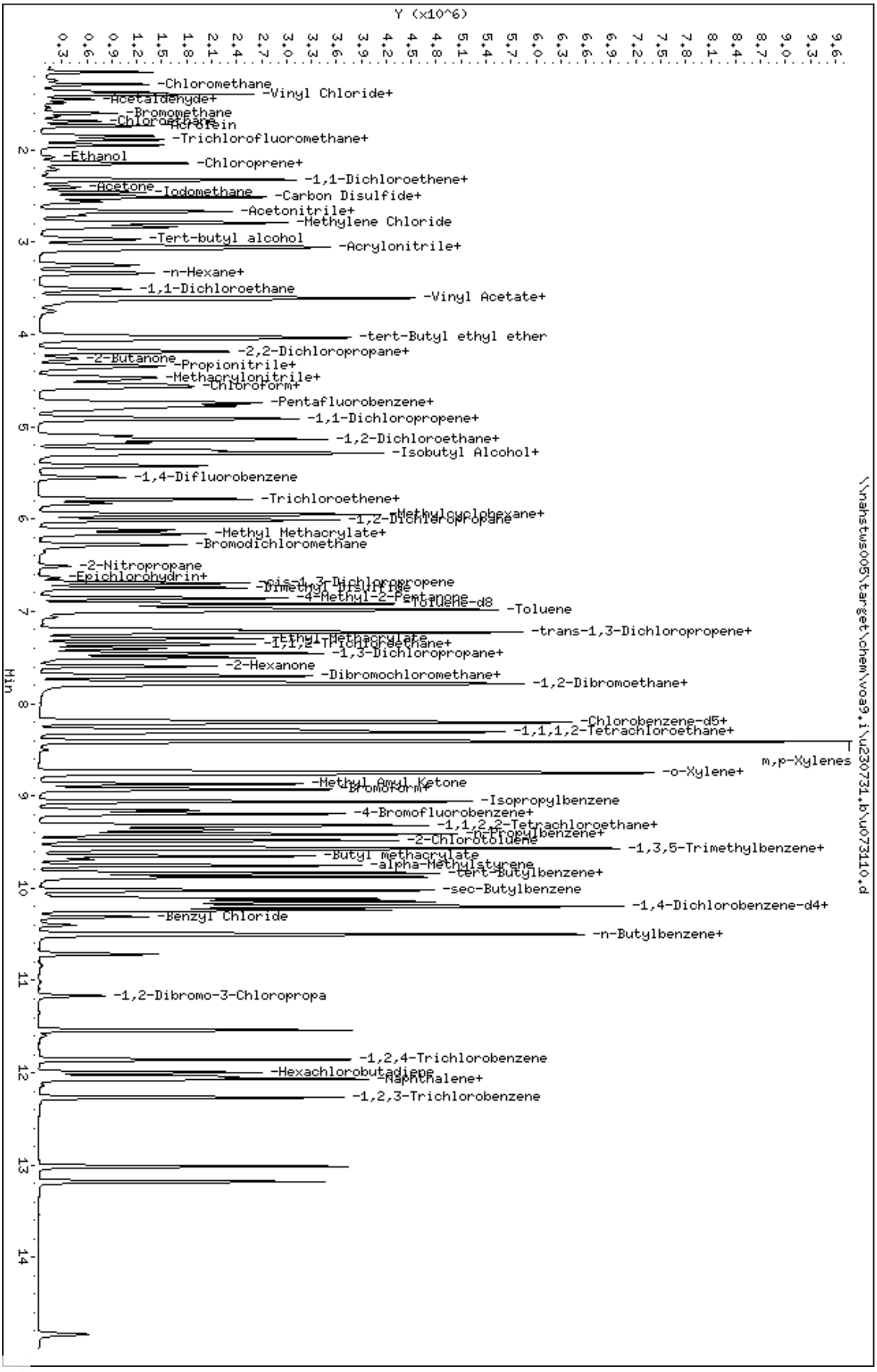
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.463	4.463	(0.928)	404224	150.000	148.75
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	673185	150.000	153.05
	31 1,1,1-Trichloroethane	97	4.737	4.737	(0.984)	1068384	150.000	156.92
	32 1,1-Dichloropropene	75	4.916	4.916	(0.886)	951085	150.000	158.71
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	1009084	150.000	145.19
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	911153	150.000	169.72
$	35 1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	729852	150.000	153.05
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	807021	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	2909338	150.000	147.58
	38 Trichloroethene	130	5.786	5.786	(1.043)	851111	150.000	152.75
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	994606	150.000	157.74
	41 2-Chloroethylvinyl ether	63	6.573	6.573	(1.184)	27126	300.000	298.47(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	784770	150.000	148.53
	44 Dibromomethane	93	6.116	6.116	(1.102)	492584	150.000	145.15
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	1760675	300.000	312.23
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	1255756	150.000	151.55
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	757857	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	2578663	150.000	146.28
	50 Toluene	91	6.978	6.978	(0.853)	3174237	150.000	154.05
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	1058091	150.000	174.10
	52 2-Hexanone	43	7.593	7.593	(0.928)	1167264	300.000	312.60
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	617355	150.000	139.89
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	1323436	150.000	146.19
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	898045	150.000	165.82
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	763419	150.000	152.39
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	793097	150.000	149.39
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	680728	150.000	161.53
	59 Chlorobenzene	112	8.208	8.208	(1.003)	2133475	150.000	146.06
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	815348	150.000	153.15
	61 Ethylbenzene	106	8.305	8.305	(1.015)	1067099	150.000	161.37
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	2643756	300.000	340.56
	63 o-Xylene	106	8.748	8.748	(1.069)	1288431	150.000	169.65
	64 Styrene	104	8.759	8.759	(1.070)	2087563	150.000	176.15
	66 Bromoform	173	8.920	8.920	(1.090)	625679	150.000	165.36
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	3206712	150.000	174.49
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	1027356	150.000	135.02
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	1028731	150.000	152.29
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	395026	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	1014556	150.000	153.14
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	3432693	150.000	150.99
	74 Bromobenzene	156	9.317	9.317	(0.916)	973908	150.000	149.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	2391650	150.000	173.24
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	2177941	150.000	156.38
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	2480954	150.000	159.48
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	2271872	150.000	173.70
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2354756	150.000	168.43
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	3013427	150.000	105.19
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	2567946	150.000	102.53
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1653085	150.000	151.55
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1696943	150.000	140.39
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	2119417	150.000	153.97
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	1631585	150.000	145.79

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	178139	150.000	162.38
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	1201951	150.000	174.59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	527704	150.000	98.49
	92 Naphthalene	128	12.065	12.065	(1.186)	2827642	150.000	152.16
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	1161534	150.000	165.26
M	94 1,2-Dichloroethylene (total)	96				1312018	300.000	
M	95 Xylenes (total)	106				3932187	450.000	
	135 1,4-Dioxane	88	6.169	6.169	(1.282)	207196	3000.00	2593.31
	141 Cyclohexane	56	4.778	4.778	(0.993)	1079520	150.000	172.36(A)
	138 Freon TF	101	2.322	2.322	(0.483)	573884	150.000	110.31
	140 1,3-Butadiene	54	1.396	1.396	(0.290)	730457	150.000	164.62
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	1960914	150.000	166.81(A)
	146 Methyl Acetate	43	2.705	2.705	(0.562)	569325	150.000	142.38
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.617)	1418139	3000.00	3033.44
	149 Isopropyl Alcohol	45	2.559	2.559	(0.532)	897894	3000.00	2915.72

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\voa9.i\u230731.b\u073110.d
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Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
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Column phase: DB624

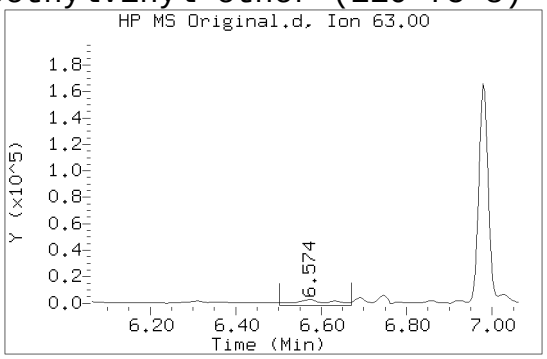
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Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 14:51
InstruID : VOA9.i
LabSampID : VSTD150

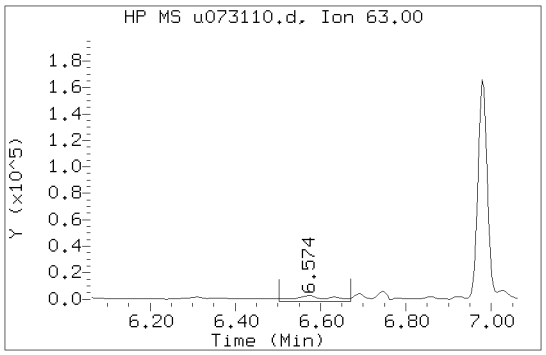
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

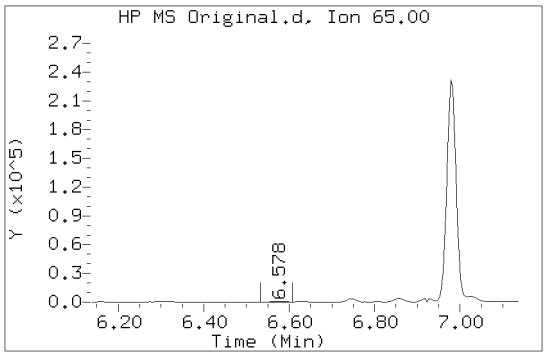
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HEIGHT
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01-Aug-2023
21:04



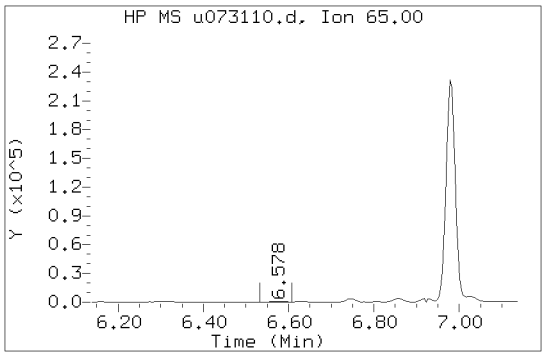
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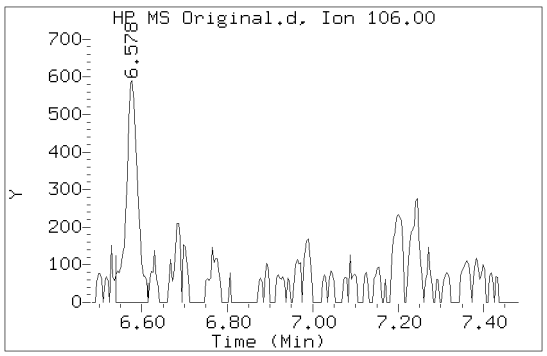
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01-Aug-2023
21:04



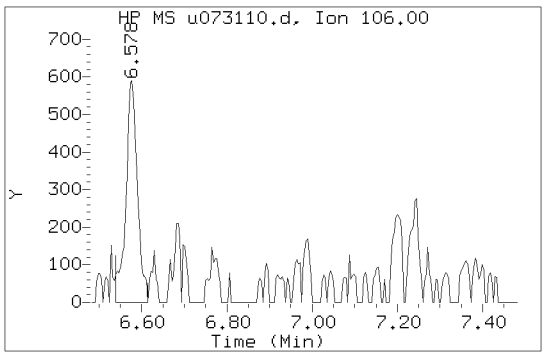
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21:04



BEFORE
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01-Aug-2023
21:04



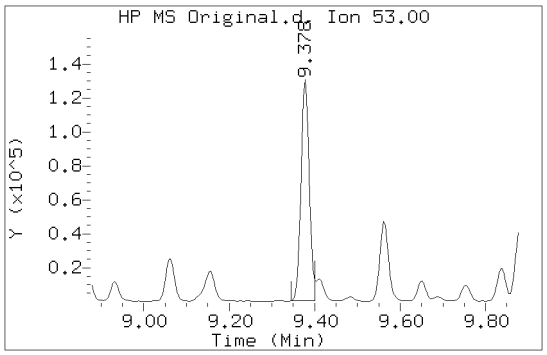
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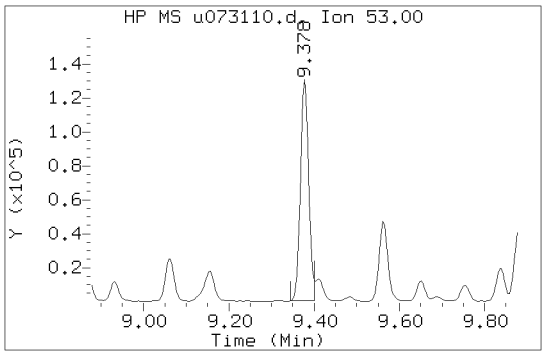
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

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01-Aug-2023
21:04



AFTER
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AREA
179641
HEIGHT
130308
01-Aug-2023
21:04



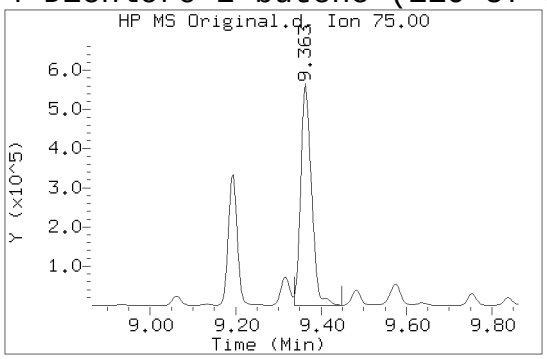
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Inj Date : 31-JUL-2023 14:51
InstruID : VOA9.i
LabSampID : VSTD150

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

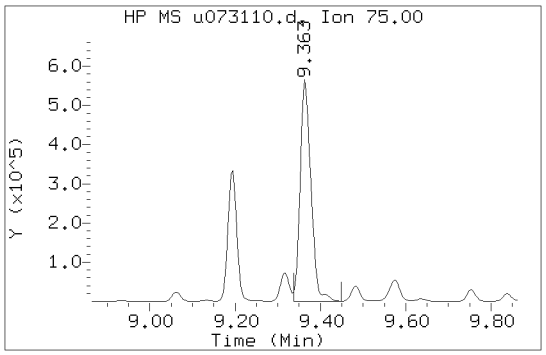
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01-Aug-2023
21:04



AFTER

MASS
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AREA
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HEIGHT
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01-Aug-2023
21:04

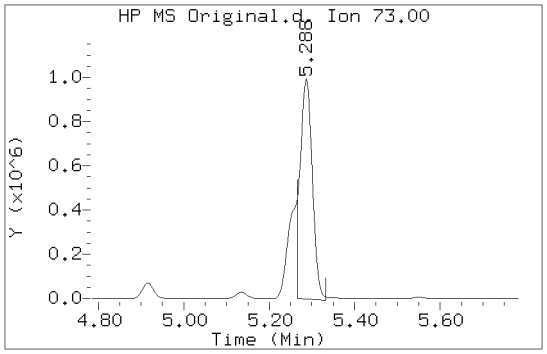


tert-Amyl methyl ether (974-05-08)

Reason Code:

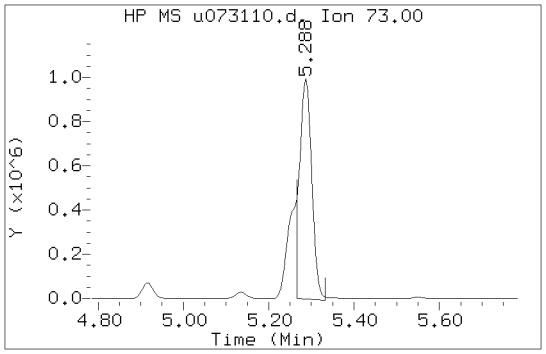
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01-Aug-2023
21:04



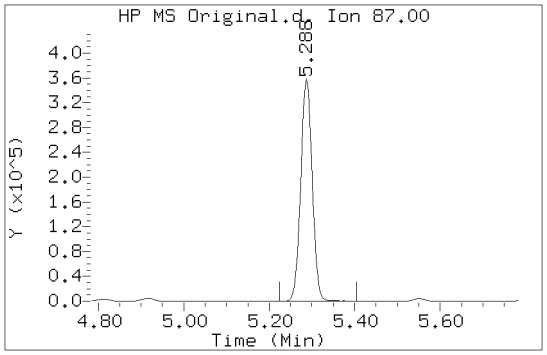
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01-Aug-2023
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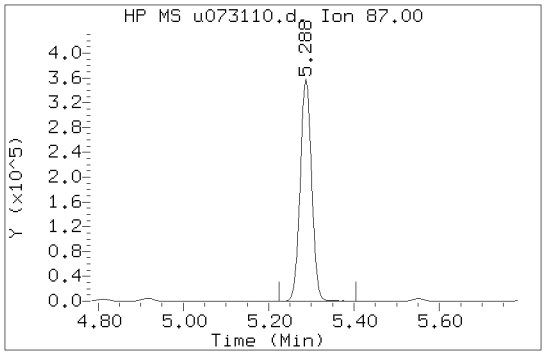
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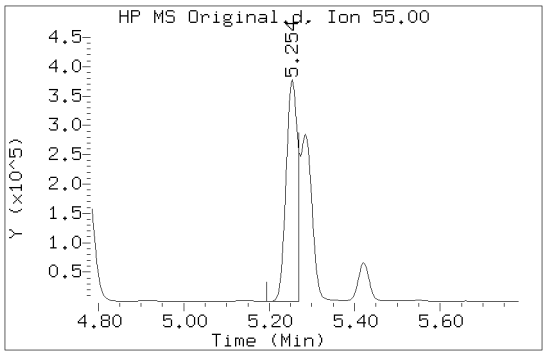
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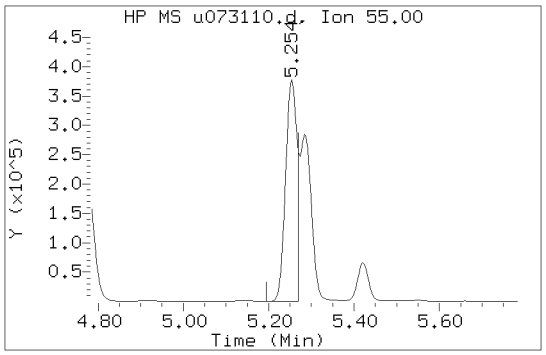
BEFORE

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AFTER

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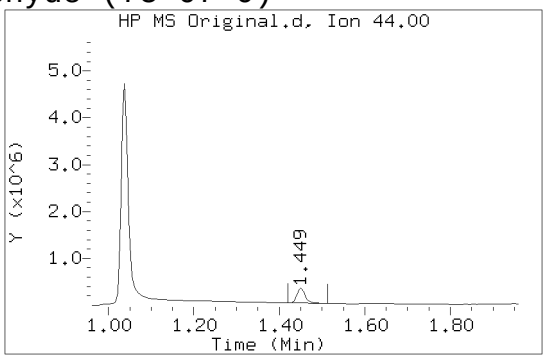


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Inj Date : 31-JUL-2023 14:51
InstruID : VOA9.i
LabSampID : VSTD150

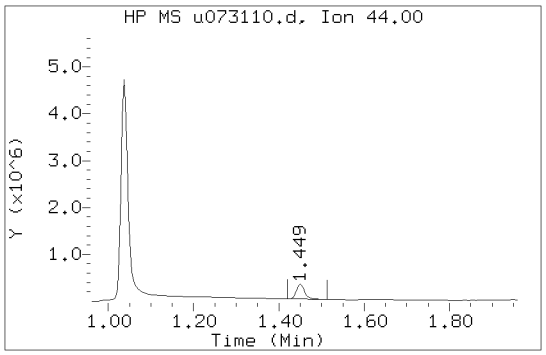
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Reason Code:

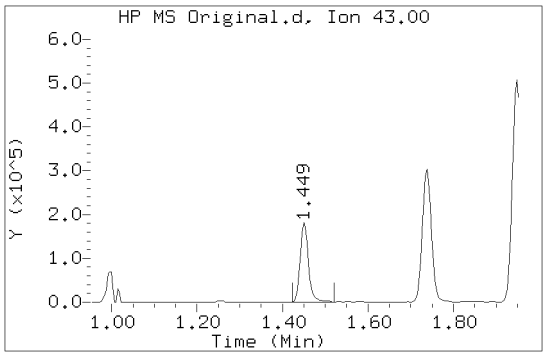
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01-Aug-2023
21:04



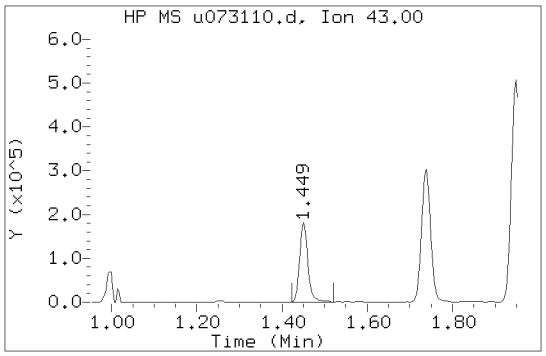
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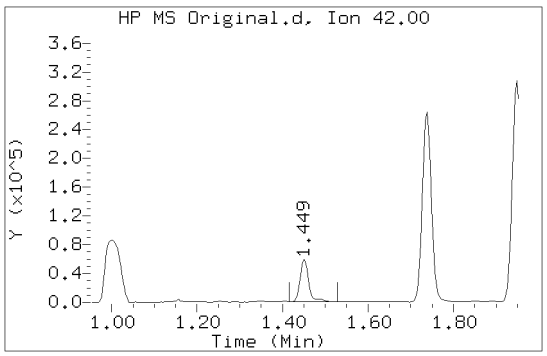
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01-Aug-2023
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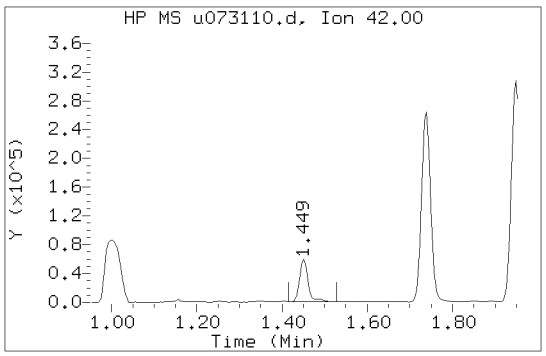
AFTER
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BEFORE
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HEIGHT
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01-Aug-2023
21:04



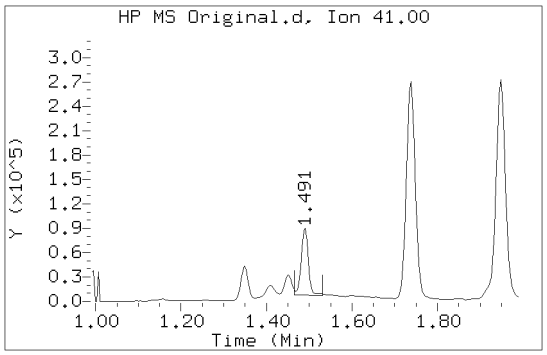
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01-Aug-2023
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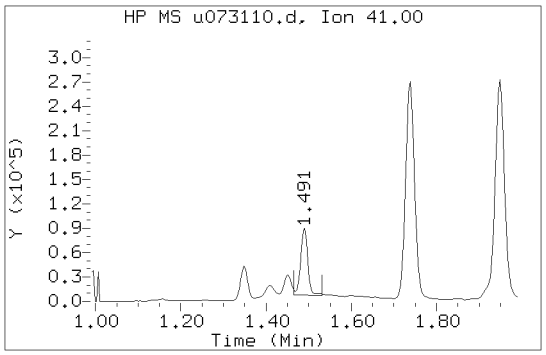
Isobutylene (115-11-7)

Reason Code:

BEFORE
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41
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01-Aug-2023
21:04



AFTER
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01-Aug-2023
21:04

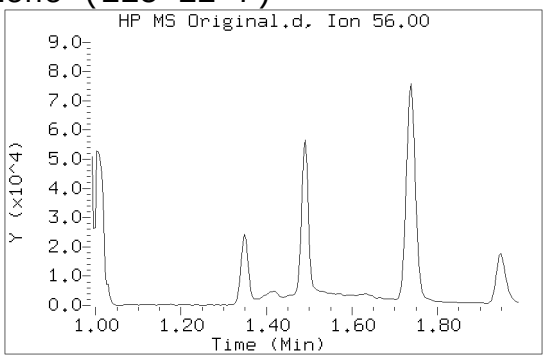


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Inj Date : 31-JUL-2023 14:51
InstruID : VOA9.i
LabSampID : VSTD150

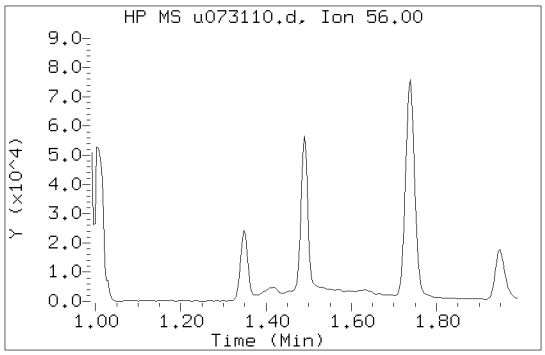
Isobutylene (115-11-7)

Reason Code:

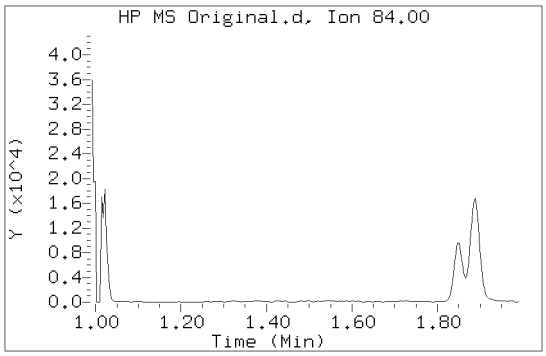
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01-Aug-2023
21:04



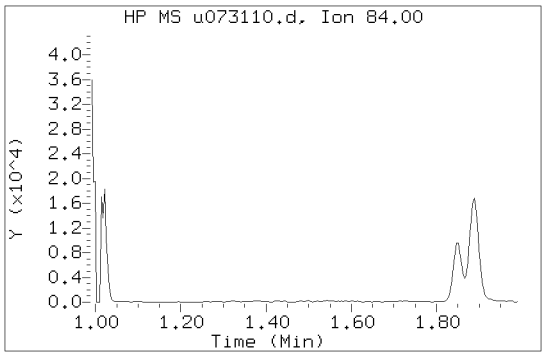
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01-Aug-2023
21:04



BEFORE
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01-Aug-2023
21:04



AFTER
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84
AREA
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HEIGHT
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01-Aug-2023
21:04



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073111.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073111.D
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Inj Date : 31-JUL-2023 15:13
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\8260C.m
Meth Date : 07-Aug-2023 11:14 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:51 Cal File: U073110.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.811	4.811	(1.000)	570202	50.0000	
2	Dichlorodifluoromethane	85	1.156	1.156	(0.240)	1019713	200.000	183.38
3	Chloromethane	50	1.291	1.291	(0.268)	1264921	200.000	189.98
5	Vinyl Chloride	62	1.370	1.370	(0.285)	1126971	200.000	200.74(A)
6	Bromomethane	94	1.599	1.599	(0.332)	507880	200.000	171.65
7	Chloroethane	64	1.685	1.685	(0.350)	666015	200.000	188.38
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	1308026	200.000	188.77
9	Acrolein	56	1.738	1.738	(0.361)	154362	400.000	422.04(A)
10	Acetone	43	2.405	2.405	(0.500)	658218	400.000	390.84(A)
11	1,1-Dichloroethene	96	2.326	2.326	(0.484)	759024	200.000	202.04(A)
15	Iodomethane	142	2.461	2.461	(0.512)	1727558	400.000	352.01
16	Acrylonitrile	53	3.061	3.061	(0.636)	707285	400.000	394.61
17	Methylene Chloride	84	2.787	2.787	(0.579)	909993	200.000	199.98
18	Methyl tert-butyl ether	73	3.076	3.076	(0.639)	2336621	200.000	201.23(A)
19	Carbon Disulfide	76	2.514	2.514	(0.522)	4402937	400.000	402.58(A)
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	815001	200.000	193.59
21	Vinyl Acetate	43	3.604	3.604	(0.749)	4975358	400.000	412.95(A)
22	1,1-Dichloroethane	63	3.511	3.511	(0.730)	1435268	200.000	186.52
24	2-Butanone	43	4.264	4.264	(0.886)	788336	400.000	351.92
26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	1066112	200.000	200.94(A)

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	935978	200.000	199.17
28 Chloroform	83	4.572	4.572 (0.950)	1666771	200.000	186.13

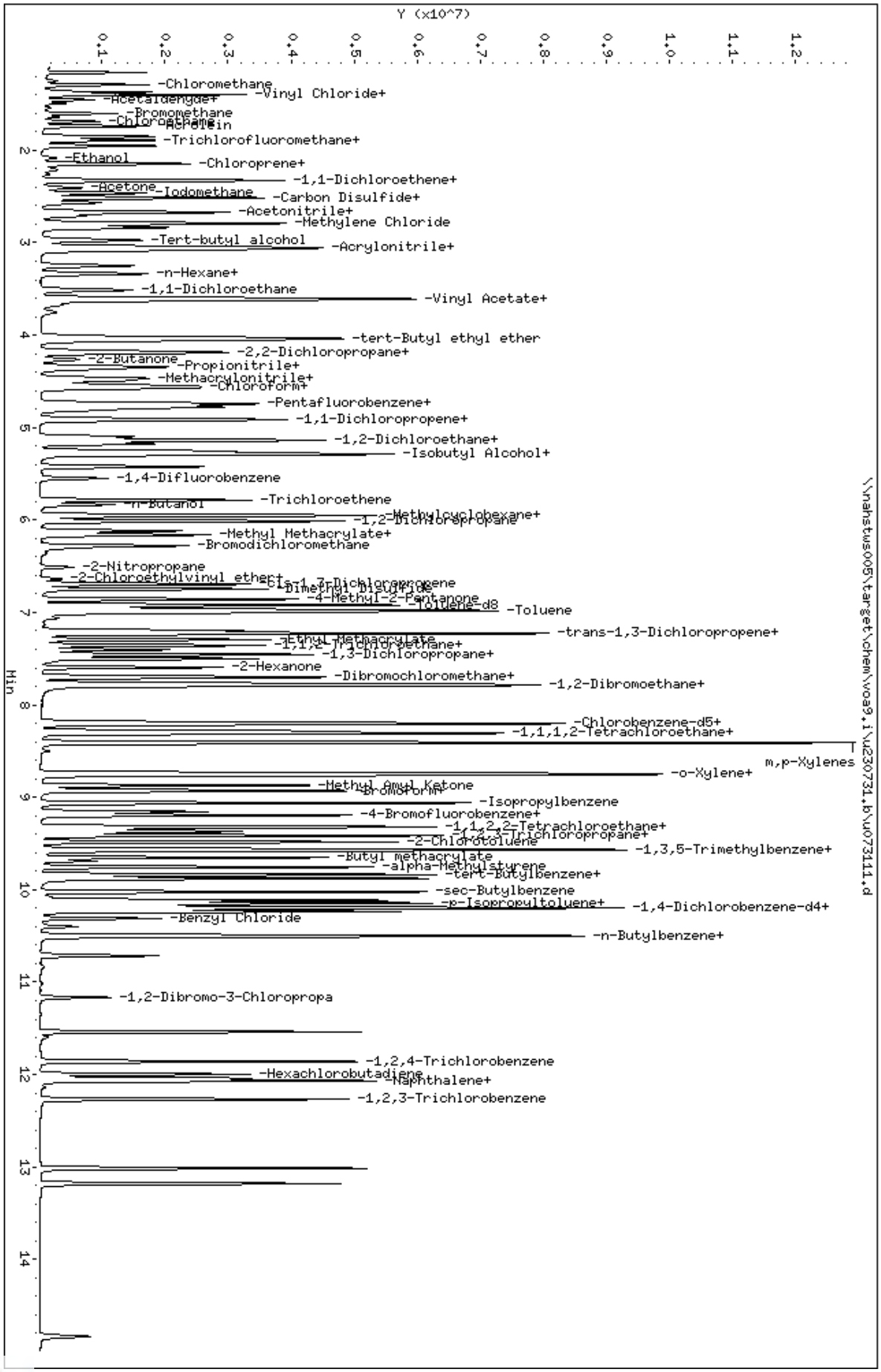
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.467	4.467	(0.928)	498347	200.000	179.21
$	30 Dibromofluoromethane	113	4.748	4.748	(0.987)	879652	200.000	195.72
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	1371560	200.000	196.87
	32 1,1-Dichloropropene	75	4.916	4.916	(0.886)	1207825	200.000	197.27
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	1335743	200.000	188.11
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	1133427	200.000	206.64(A)
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	950577	200.000	195.17
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	824550	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	3816784	200.000	189.49
	38 Trichloroethene	130	5.786	5.786	(1.043)	1105898	200.000	194.26
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	1321967	200.000	205.21(A)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	9808	400.000	104.91
	42 1,2-Dichloropropane	63	6.011	6.011	(1.083)	1039756	200.000	192.61
	44 Dibromomethane	93	6.120	6.120	(1.103)	666792	200.000	192.30
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	2391345	400.000	406.74(A)
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.206)	1704761	200.000	200.64(A)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	790154	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	3405550	200.000	185.30
	50 Toluene	91	6.982	6.982	(0.853)	4184874	200.000	194.80
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	1452570	200.000	233.93(A)
	52 2-Hexanone	43	7.593	7.593	(0.928)	1597049	400.000	410.22(A)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	830168	200.000	180.42
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	1766495	200.000	187.16
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1214851	200.000	215.14(A)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	979030	200.000	187.44
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	1065136	200.000	192.43
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	873975	200.000	202.98(A)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	2824872	200.000	185.49
	60 1,1,1,2-Tetrachloroethane	131	8.286	8.286	(1.012)	1105730	200.000	199.21
	61 Ethylbenzene	106	8.309	8.309	(1.015)	1413378	200.000	205.00(A)
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	3469755	400.000	428.69(A)
	63 o-Xylene	106	8.748	8.748	(1.069)	1710909	200.000	216.07(A)
	64 Styrene	104	8.763	8.763	(1.071)	2829265	200.000	228.98(A)
	66 Bromoform	173	8.920	8.920	(1.090)	865119	200.000	219.30(A)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	4166795	200.000	217.47(A)
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	1373844	200.000	175.48
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	1374126	200.000	195.49
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	406460	50.0000	
	71 1,2,3-Trichloropropane	75	9.366	9.366	(0.921)	1391040	200.000	204.06(A)
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	4612232	200.000	196.67
	74 Bromobenzene	156	9.317	9.317	(0.916)	1303306	200.000	193.82
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	3157707	200.000	222.29(A)
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	2873591	200.000	200.53(A)
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	3265271	200.000	203.99(A)
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	2926405	200.000	217.45(A)
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	3151112	200.000	219.06(A)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	3876784	200.000	90.88
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	3372466	200.000	80.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	2183578	200.000	194.56
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	2243745	200.000	180.41
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	2783598	200.000	195.87
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	2147264	200.000	186.47

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	250171	200.000	221.63(A)
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	1610904	200.000	227.41(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	659381	200.000	80.10
	92 Naphthalene	128	12.065	12.065	(1.186)	3794466	200.000	197.95
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	1538961	200.000	212.80(A)
M	94 1,2-Dichloroethylene (total)	96				1750979	400.000	
M	95 Xylenes (total)	106				5180664	600.000	
	135 1,4-Dioxane	88	6.168	6.168	(1.282)	278742	4000.00	3409.48
	141 Cyclohexane	56	4.778	4.778	(0.993)	1335056	200.000	208.31(A)
	138 Freon TF	101	2.326	2.326	(0.484)	699712	200.000	105.50
	140 1,3-Butadiene	54	1.396	1.396	(0.290)	922301	200.000	203.14(A)
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	2583280	200.000	215.09(A)
	146 Methyl Acetate	43	2.708	2.708	(0.563)	747739	200.000	182.75
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	1911477	4000.00	3996.72
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	1191893	4000.00	3782.42

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.



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Column phase: DB624

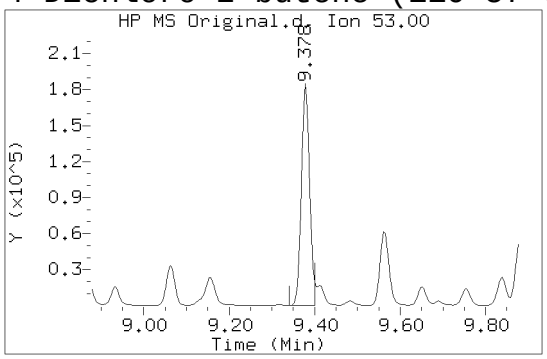
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Operator: PC
Column diameter: 0.18

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Inj Date : 31-JUL-2023 15:13
InstruID : VOA9.i
LabSampID : VSTD200

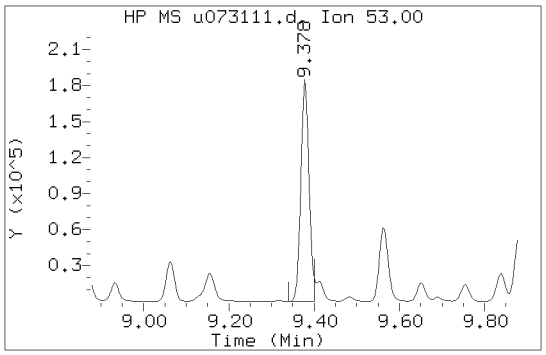
trans-1,4-Dichloro-2-butene (110-57-6)

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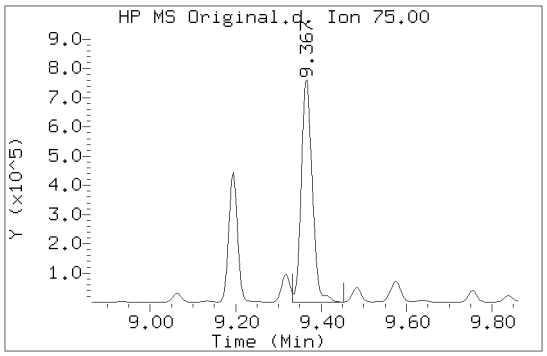
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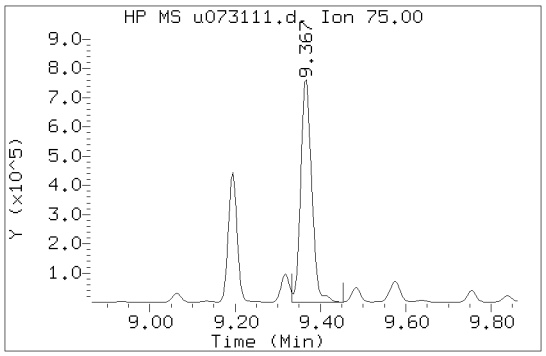
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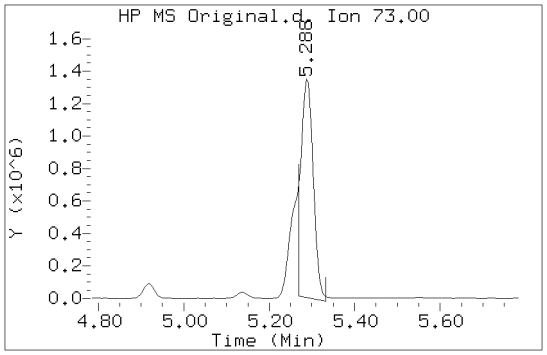
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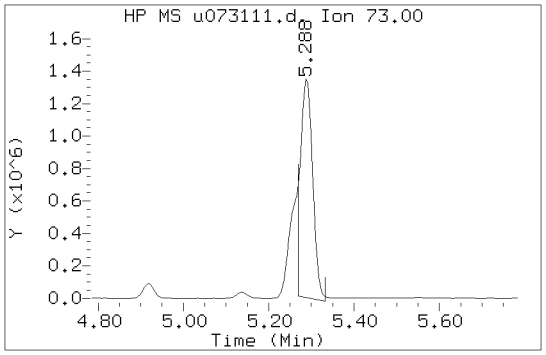
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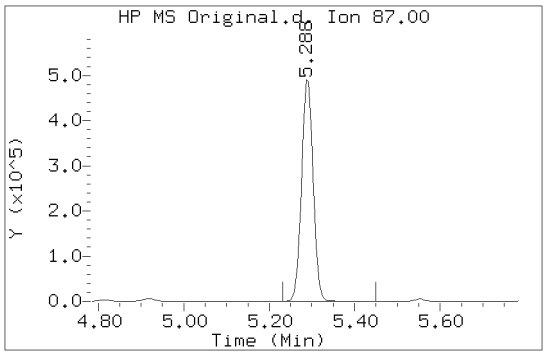
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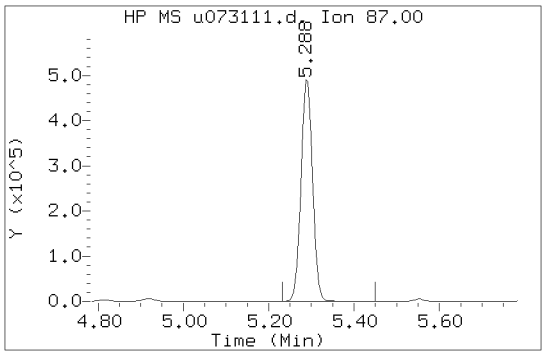
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BEFORE
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AFTER
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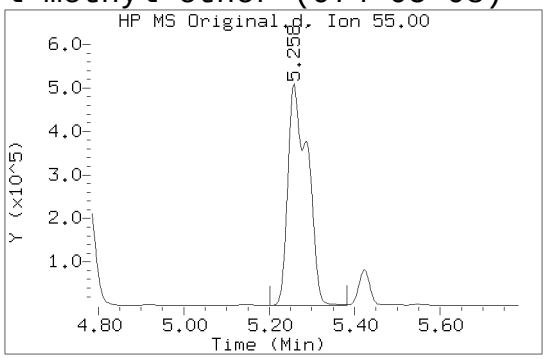
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InstruID : VOA9.i
LabSampID : VSTD200

tert-Amyl methyl ether (974-05-08)

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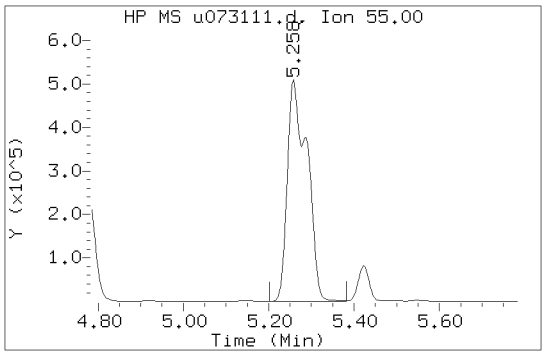
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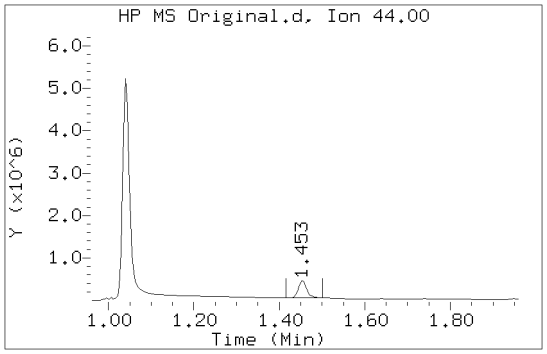


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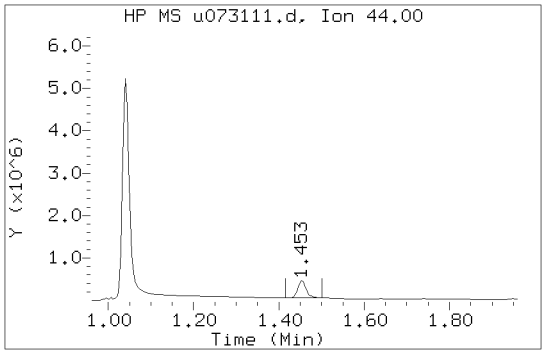
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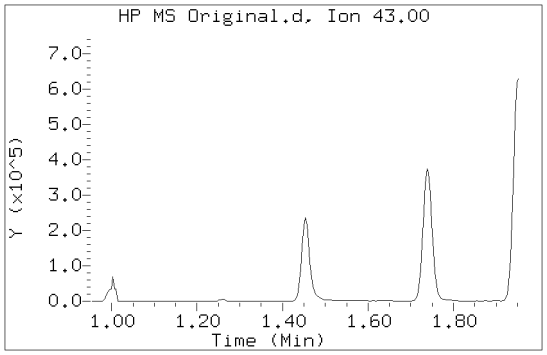
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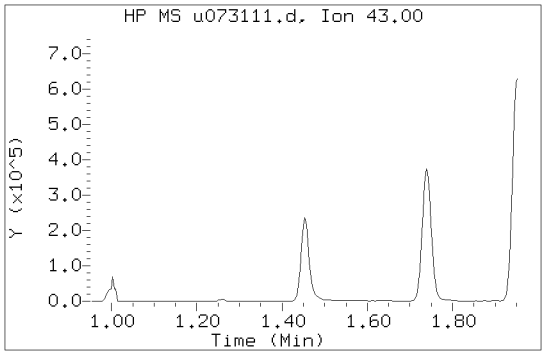
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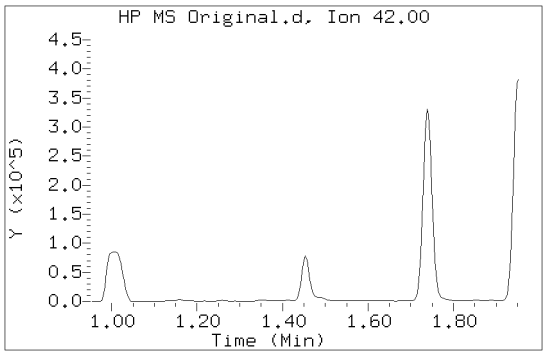
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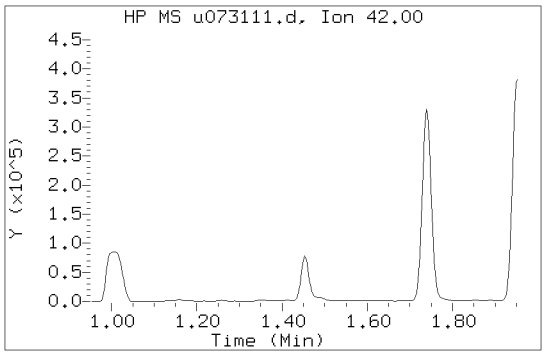
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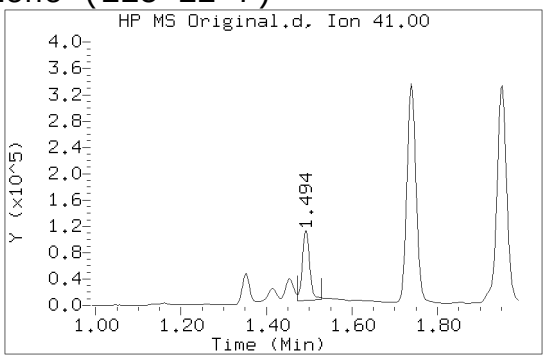


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InstruID : VOA9.i
LabSampID : VSTD200

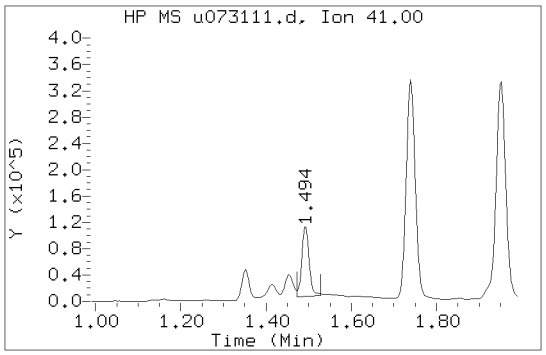
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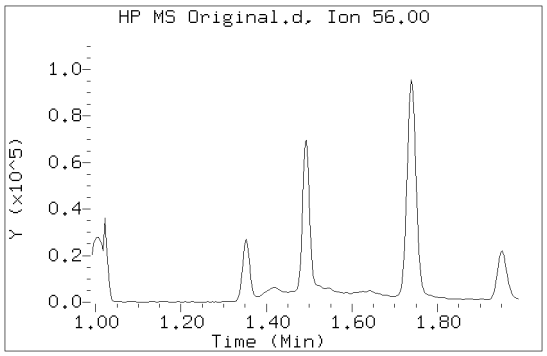
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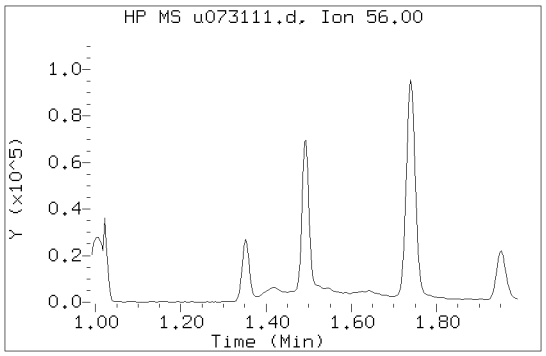
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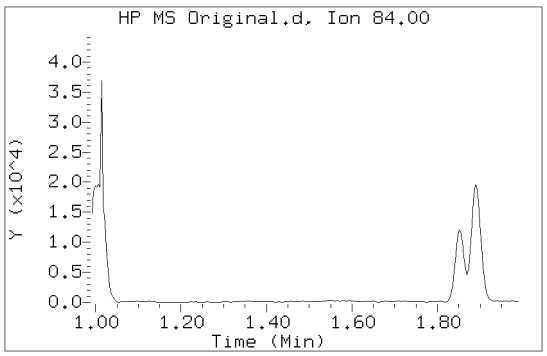
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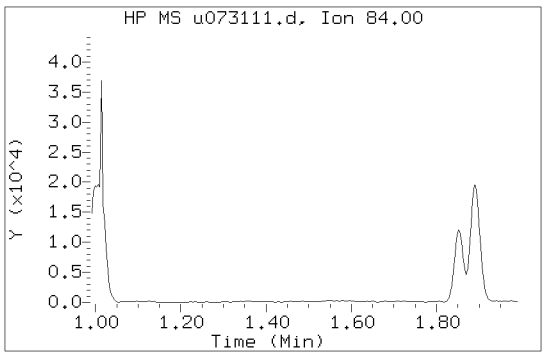
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AFTER
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Data File: \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073113.D Page 1
Report Date: 07-Aug-2023 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230731.b\U073113.D
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Inj Date : 31-JUL-2023 15:57
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;ICV
Misc Info : V9;WATER;0;1;
Comment :
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Cal Date : 31-JUL-2023 15:13 Cal File: U073111.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.811	(1.000)	586872	50.0000	
2 Dichlorodifluoromethane	85	1.156	1.156	(0.240)	231901	41.5004	41.50
3 Chloromethane	50	1.291	1.291	(0.268)	308539	44.7605	44.76
5 Vinyl Chloride	62	1.370	1.370	(0.285)	254476	44.0407	44.04
6 Bromomethane	94	1.614	1.599	(0.335)	166237	53.4715	53.47
7 Chloroethane	64	1.693	1.685	(0.352)	158516	43.5644	43.56
8 Trichlorofluoromethane	101	1.887	1.891	(0.392)	298086	41.7982	41.79
9 Acrolein	56	1.741	1.738	(0.362)	30707	81.5725	81.57
10 Acetone	43	2.405	2.405	(0.500)	189178	103.249	103.24
11 1,1-Dichloroethene	96	2.326	2.326	(0.483)	171838	44.4419	44.44
15 Iodomethane	142	2.461	2.461	(0.512)	331402	89.7712	89.77
16 Acrylonitrile	53	3.061	3.061	(0.636)	173385	93.9898	93.98
17 Methylene Chloride	84	2.787	2.787	(0.579)	218974	46.6075	46.60
18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	564440	47.2299	47.22
19 Carbon Disulfide	76	2.514	2.514	(0.522)	1032983	91.7693	91.76
20 trans-1,2-Dichloroethene	96	3.050	3.053	(0.634)	190107	43.8748	43.87
21 Vinyl Acetate	43	3.601	3.604	(0.748)	1202045	96.9359	96.93
22 1,1-Dichloroethane	63	3.507	3.511	(0.729)	335609	42.3758	42.37
24 2-Butanone	43	4.264	4.264	(0.886)	205343	89.0635	89.06
26 2,2-Dichloropropane	77	4.174	4.178	(0.868)	254593	46.6233	46.62

27	cis-1,2-Dichloroethene	96	4.189	4.193 (0.871)	219638	45.4114	45.41
28	Chloroform	83	4.568	4.572 (0.949)	393581	42.7038	42.70

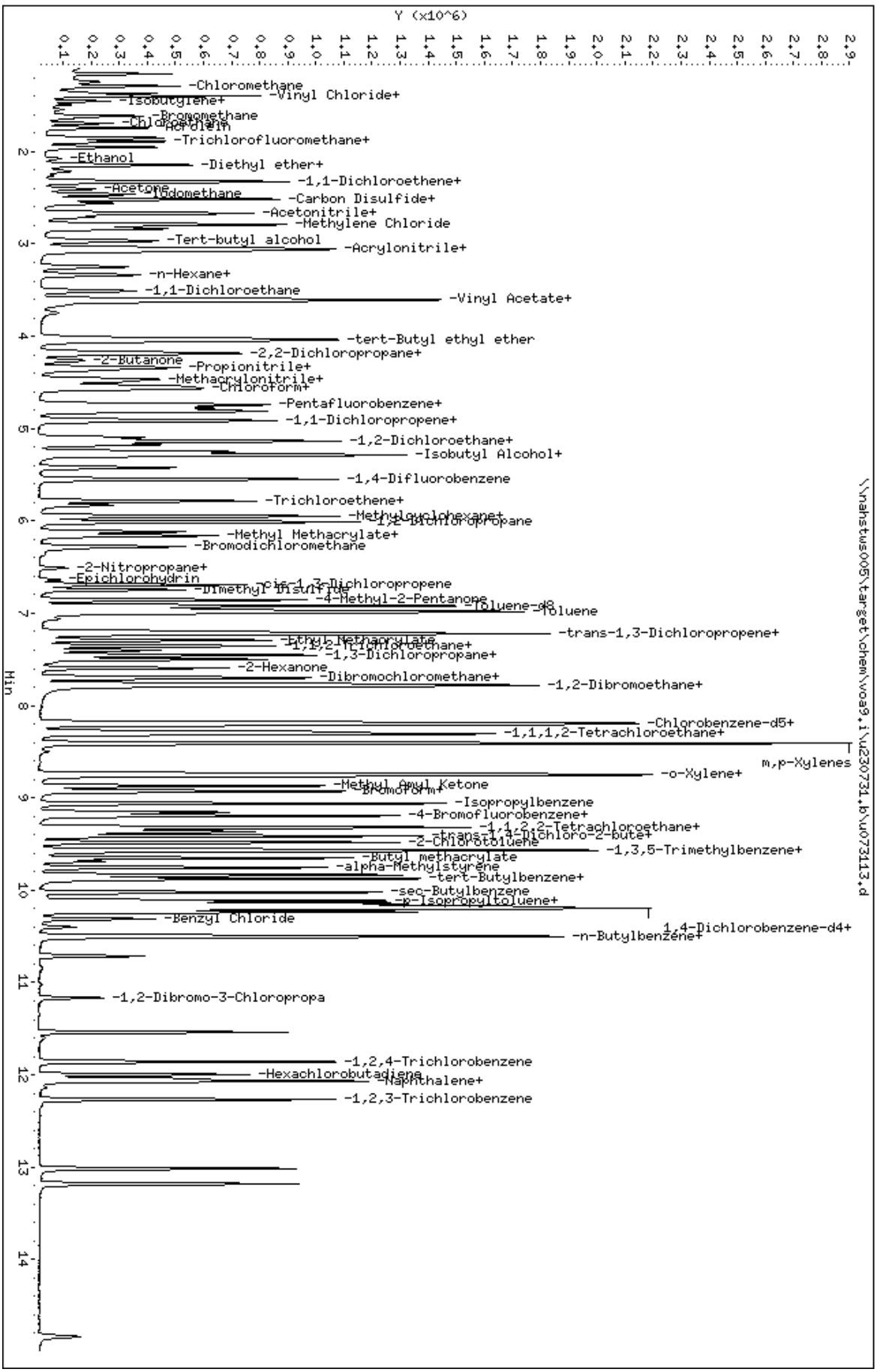
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.463	4.467	(0.928)	121210	42.3518	42.35
$	30 Dibromofluoromethane	113	4.744	4.748	(0.986)	228111	48.5703	48.57
	31 1,1,1-Trichloroethane	97	4.736	4.740	(0.984)	302944	42.2492	42.24
	32 1,1-Dichloropropene	75	4.916	4.916	(0.886)	276559	44.9086	44.90
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	321433	45.0067	45.00
	34 Carbon Tetrachloride	117	4.905	4.909	(0.884)	228059	41.3385	41.33
$	35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	244458	47.7631	47.76
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	829346	50.0000	
	37 Benzene	78	5.134	5.138	(0.925)	911920	45.0133	45.01
	38 Trichloroethene	130	5.786	5.786	(1.043)	254593	44.4633	44.46
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	293437	45.2876	45.28
	41 2-Chloroethylvinyl ether	63	6.562	6.577	(1.182)	7925	84.0686	84.06(M)
	42 1,2-Dichloropropane	63	6.007	6.011	(1.082)	246953	45.4824	45.48
	44 Dibromomethane	93	6.116	6.120	(1.102)	158311	45.3943	45.39
	45 4-Methyl-2-Pentanone	43	6.855	6.858	(0.837)	567410	98.8517	98.85
	46 cis-1,3-Dichloropropene	75	6.690	6.693	(1.205)	370428	45.0728	45.07
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	771437	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	907991	50.6041	50.60
	50 Toluene	91	6.978	6.982	(0.853)	989176	47.1624	47.16
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	312150	49.9815	49.98
	52 2-Hexanone	43	7.593	7.593	(0.928)	383453	100.884	100.88
	53 1,1,2-Trichloroethane	83	7.353	7.357	(0.898)	199841	44.4867	44.48
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	419694	45.5457	45.54
	55 Dibromochloromethane	129	7.690	7.694	(0.940)	269696	48.9216	48.92
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	221025	43.3447	43.34
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	252062	46.6438	46.64
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	175594	40.5459	40.54
	59 Chlorobenzene	112	8.208	8.212	(1.003)	678750	45.6510	45.65
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.286	(1.012)	244784	45.1713	45.17
	61 Ethylbenzene	106	8.305	8.309	(1.015)	316080	46.9589	46.95
	62 m,p-Xylenes	106	8.406	8.410	(1.027)	793036	100.359	100.35
	63 o-Xylene	106	8.748	8.748	(1.069)	389527	50.3885	50.38
	64 Styrene	104	8.763	8.763	(1.071)	640797	53.1212	53.12
	66 Bromoform	173	8.920	8.920	(1.090)	188437	48.9270	48.92
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	898452	48.0303	48.03
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	342233	43.4452	43.44
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	354282	50.6059	50.60
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	408967	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.366	(0.920)	325886	47.5154	47.51
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	982839	42.9466	42.94
	74 Bromobenzene	156	9.317	9.317	(0.916)	307453	45.4426	45.44
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	685273	47.9461	47.94
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	657409	45.5958	45.59
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	756542	46.9757	46.97
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	612686	45.2488	45.24
	79 1,2,4-Trimethylbenzene	105	9.876	9.880	(0.971)	716435	49.5002	49.50
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	795064	51.0573	51.05
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	684325	53.0116	53.01
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	503873	44.6211	44.62
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	525749	42.0142	42.01
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	575686	42.1612	42.16
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	502953	43.4107	43.41

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.165 (1.098)	51032	44.9334	44.93
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	346158	48.5682	48.56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	148428	55.9981	55.99
	92 Naphthalene	128	12.065	12.065	(1.186)	841153	44.8549	44.85
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	334790	46.0110	46.01
M	94 1,2-Dichloroethylene (total)	96				409745	89.2862	89.28
M	95 Xylenes (total)	106				1182563	150.748	150.74
	135 1,4-Dioxane	88	6.168	6.168	(1.282)	67615	803.552	803.55
	141 Cyclohexane	56	4.778	4.778	(0.993)	283626	42.9988	42.99
	138 Freon TF	101	2.326	2.326	(0.483)	156960	49.8056	49.80
	140 1,3-Butadiene	54	1.396	1.396	(0.290)	209079	44.7426	44.74
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	551131	45.6239	45.62
	146 Methyl Acetate	43	2.708	2.708	(0.563)	179622	42.6545	42.65
	148 Tert-Butyl alcohol	59	2.963	2.971	(0.616)	469230	950.874	950.87
	149 Isopropyl Alcohol	45	2.559	2.566	(0.532)	287541	886.580	886.57

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: CCV;CCV;2;;;ICV
Purge Volume: 5.0
Column phase: DB624

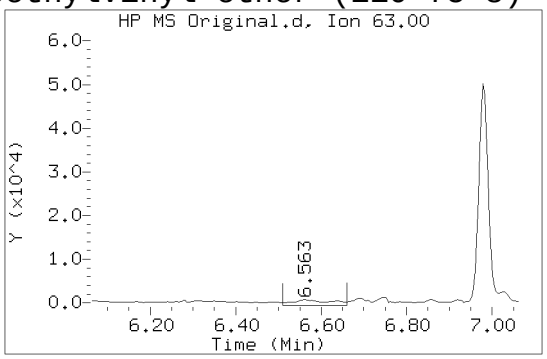
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

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LabSampID : CCV

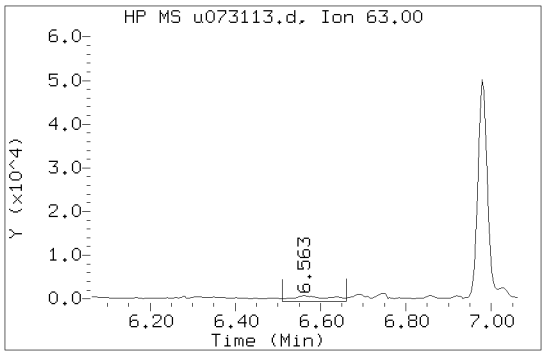
2-Chloroethylvinyl ether (110-75-8)

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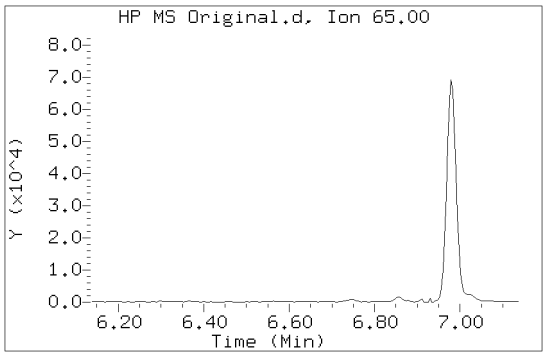
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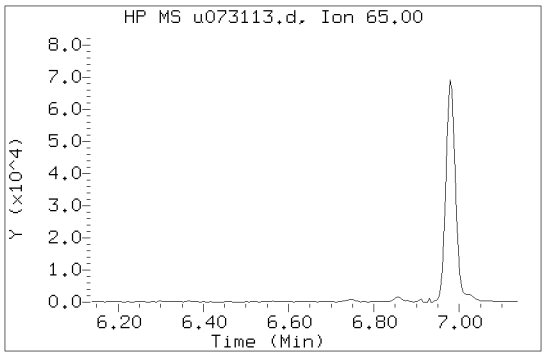
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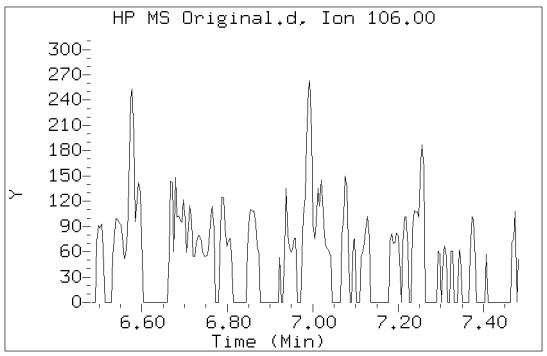
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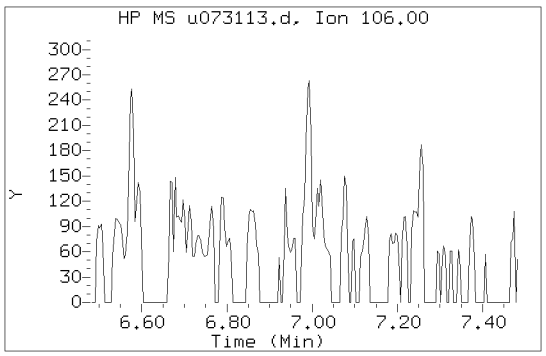
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21:06



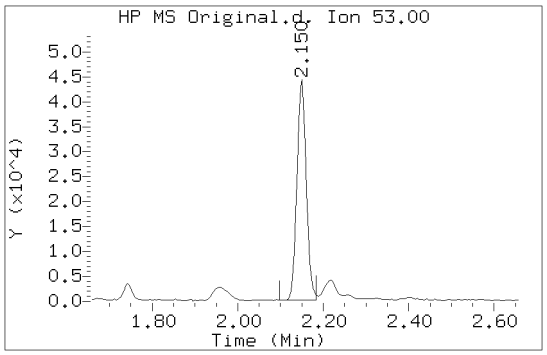
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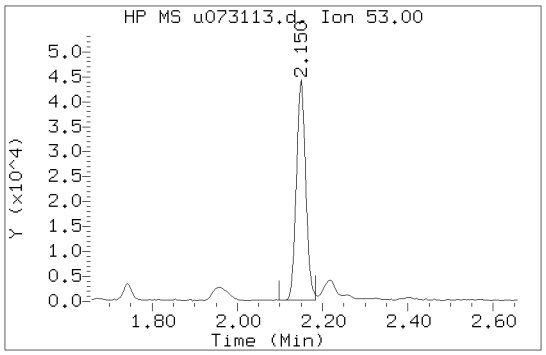
Chloroprene (126-99-8)

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AFTER
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01-Aug-2023
21:06



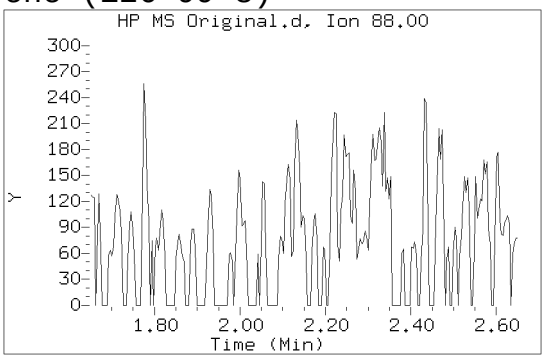
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InstruID : VOA9.i
LabSampID : CCV

Chloroprene (126-99-8)

Reason Code:

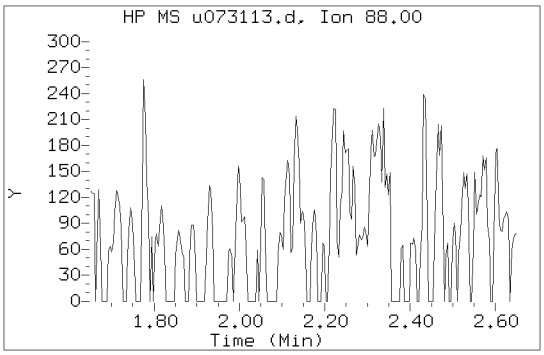
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AFTER

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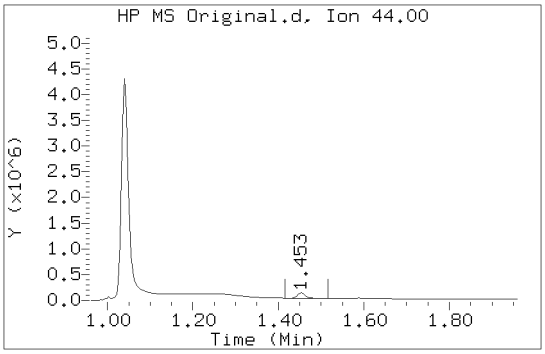


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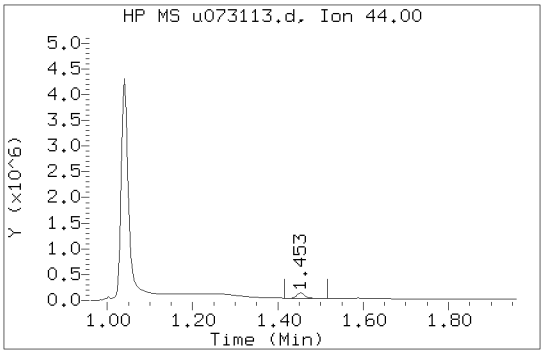
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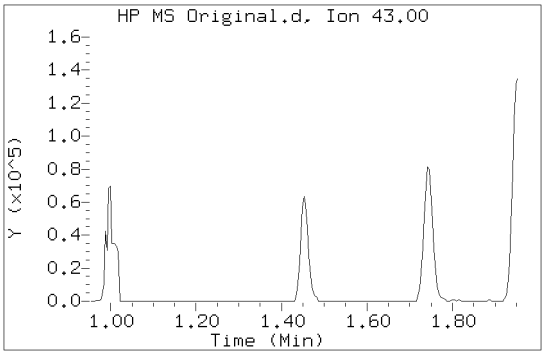
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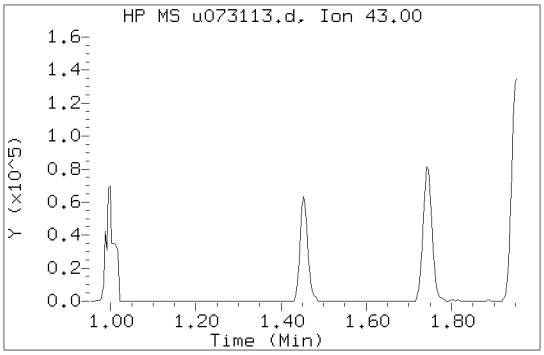
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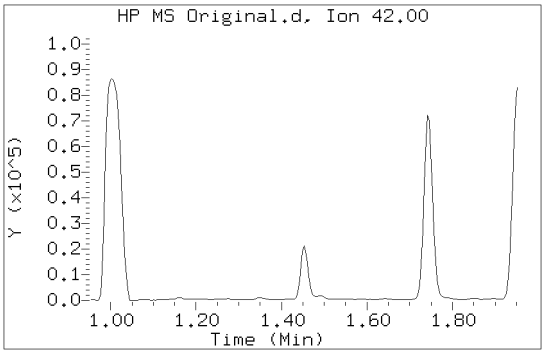
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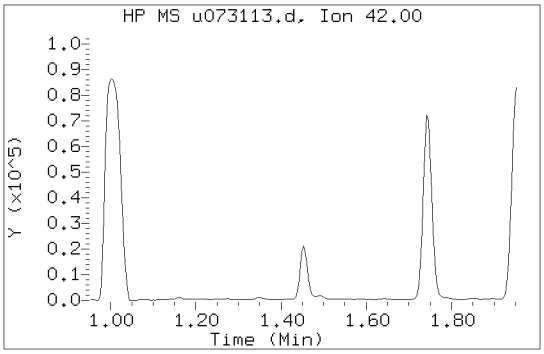
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AFTER

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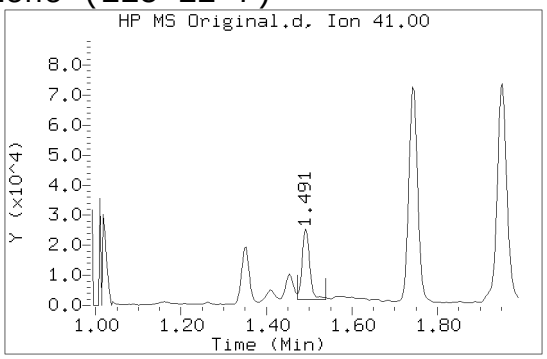


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LabSampID : CCV

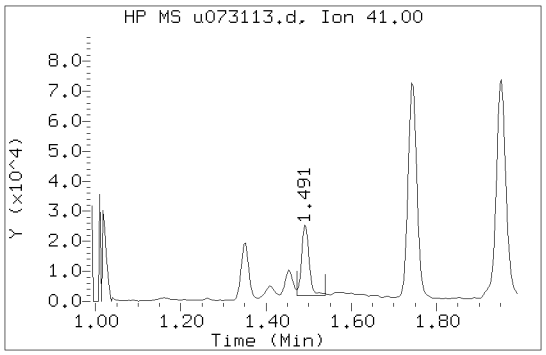
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Reason Code:

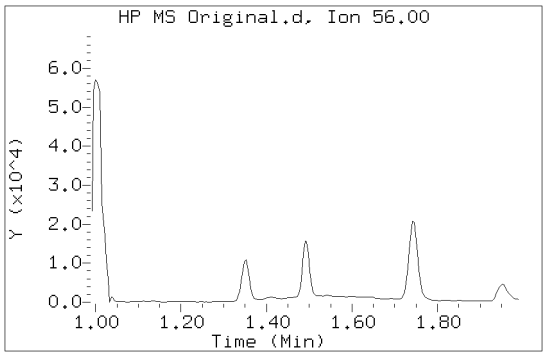
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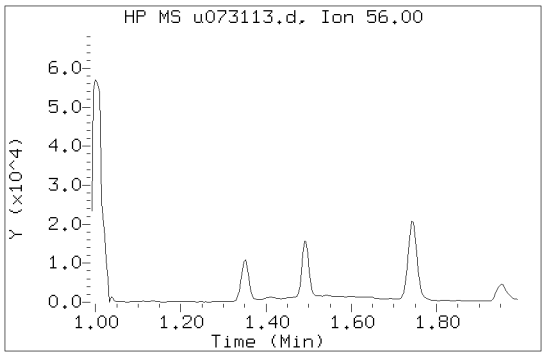
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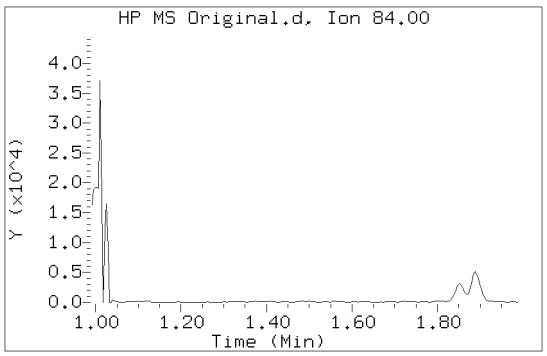
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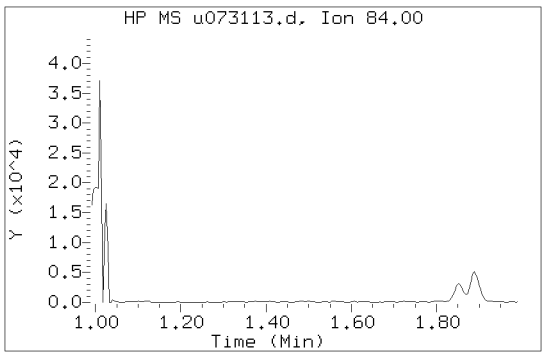
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01-Aug-2023
21:06



AFTER
MASS
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AREA
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HEIGHT
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01-Aug-2023
21:06



01248512

right solutions.
right partner.

Raw Data VOA9 443493

Volatiles by EPA 8260

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/10/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

www.alsglobal.com

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080801.D
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Inj Date : 08-AUG-2023 10:53
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment :
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Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
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Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	136640			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	24704			15.00- 40.00	18.08
9.194	9.180	(0.000)	75	65640			30.00- 60.00	48.04
9.194	9.180	(0.000)	96	9195			5.00- 9.00	6.73
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	127808			50.00- 0.00	93.54
9.194	9.180	(0.000)	175	11209			5.00- 9.00	8.77
9.194	9.180	(0.000)	176	123744			95.00- 101.00	96.82
9.194	9.180	(0.000)	177	8581			5.00- 9.00	6.93

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.08
75	30.00 - 60.00% of mass 95	48.04
96	5.00 - 9.00% of mass 95	6.73
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	93.54
175	5.00 - 9.00% of mass 174	8.20 (8.77)
176	95.00 - 101.00% of mass 174	90.56 (96.82)
177	5.00 - 9.00% of mass 176	6.28 (6.93)

Data File: U080801.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 132

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36.10	1297	69.00	13436	109.70	102	145.90	208
37.00	6640	70.00	1324	110.60	135	146.90	121
38.00	5911	71.00	177	111.30	50	147.70	406
39.00	2399	72.10	917	112.00	51	148.80	116
39.90	406	73.00	5982	112.80	178	149.90	161
41.00	211	74.00	22224	114.90	181	151.80	83
41.70	120	75.00	65640	115.80	472	152.80	143
42.20	91	76.00	6293	116.90	943	153.90	160
43.00	187	77.10	1001	117.80	392	154.90	412
44.00	1188	77.80	717	118.70	618	156.80	263
44.90	1044	78.90	3119	120.00	70	157.70	63
45.80	194	80.00	1096	121.60	103	158.70	182
47.00	2147	80.90	3127	122.70	62	160.30	58
47.90	945	81.90	792	123.90	129	161.00	279
49.00	5564	82.80	106	126.10	80	161.40	52
50.00	24704	83.30	58	126.80	79	164.30	81
51.00	7510	84.00	97	127.80	665	165.10	59
52.00	525	86.90	6070	129.00	313	167.00	53
52.90	157	87.90	5262	129.80	665	168.00	74
53.60	91	89.30	116	131.00	172	170.00	140
54.20	116	91.00	555	132.00	75	171.00	262
55.10	524	92.00	3557	132.60	69	171.90	1209
56.00	1912	93.00	6147	134.00	62	173.90	127808
57.00	3528	94.00	16672	134.70	263	175.00	11209
58.00	188	95.00	136640	135.10	185	175.90	123744
58.80	92	96.00	9195	136.90	279	176.90	8581
60.00	1267	96.90	311	138.10	58	178.00	188
61.00	6086	97.90	83	138.50	78	207.00	66
62.00	6426	101.50	71	138.90	157	273.40	55
63.00	4439	102.10	76	141.00	1416	316.80	58
63.90	674	104.00	479	141.90	230		
65.00	603	105.10	239	142.90	1747		
66.90	347	106.00	552	143.80	77		
68.00	13180	106.80	223	145.10	253		

Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080801.d Page 1

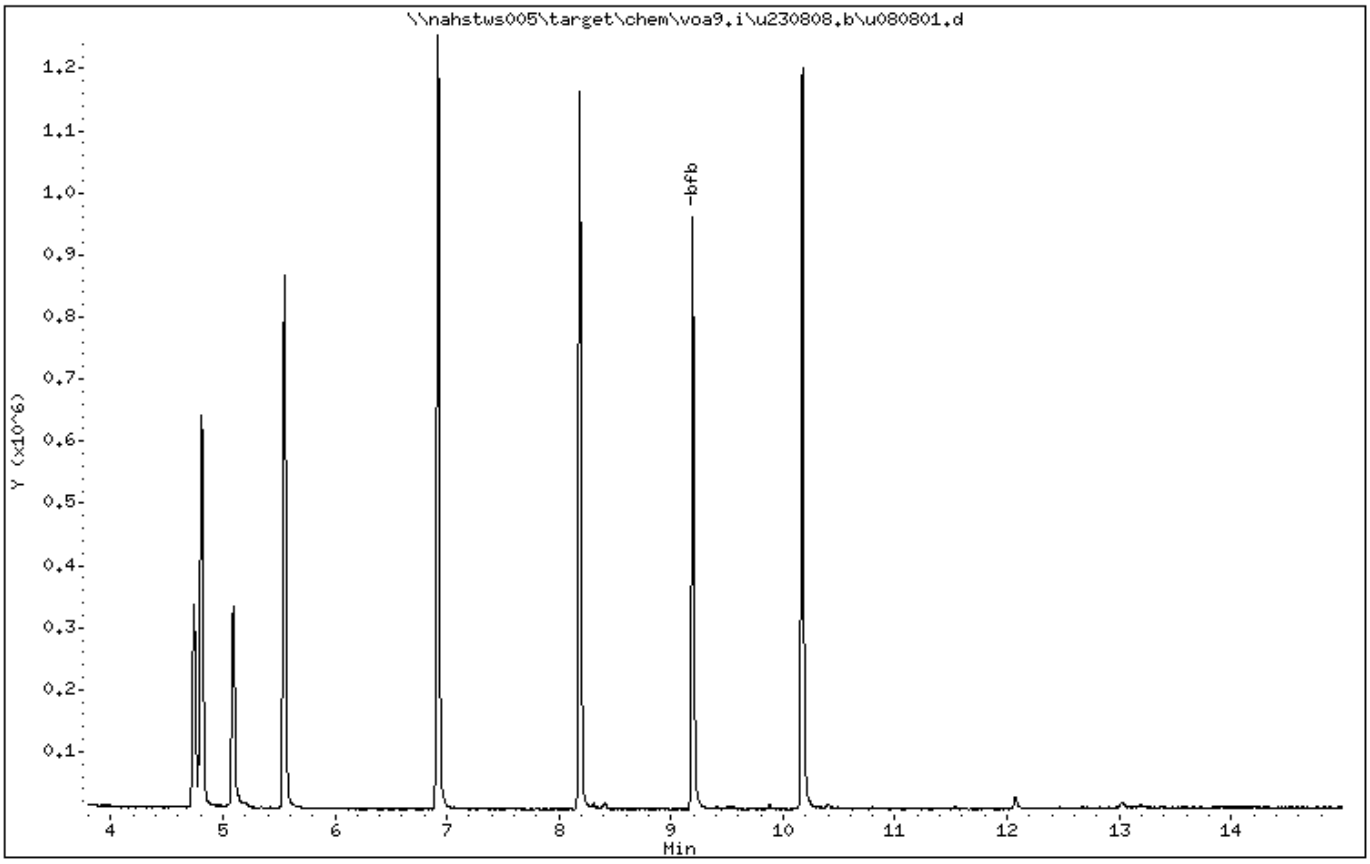
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Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080803.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 08-AUG-2023 11:37
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 22:23 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.812	4.812	(1.000)	407824	50.0000	
2	Dichlorodifluoromethane	85	1.157	1.157	(0.240)	155802	50.0000	40.16
3	Chloromethane	50	1.288	1.288	(0.268)	212388	50.0000	44.33
5	Vinyl Chloride	62	1.366	1.366	(0.284)	166495	50.0000	41.46
6	Bromomethane	94	1.610	1.610	(0.335)	107275	50.0000	49.53
7	Chloroethane	64	1.689	1.689	(0.351)	112508	50.0000	44.49
8	Trichlorofluoromethane	101	1.888	1.888	(0.392)	219466	50.0000	44.28
9	Acrolein	56	1.741	1.741	(0.362)	23405	100.000	89.47
10	Acetone	43	2.401	2.401	(0.499)	133934	100.000	105.34
11	1,1-Dichloroethene	96	2.322	2.322	(0.483)	126719	50.0000	47.16
15	Iodomethane	142	2.461	2.461	(0.512)	262330	100.000	101.00
16	Acrylonitrile	53	3.057	3.057	(0.635)	136017	100.000	106.10
17	Methylene Chloride	84	2.787	2.787	(0.579)	163566	50.0000	50.11
18	Methyl tert-butyl ether	73	3.072	3.072	(0.639)	496460	50.0000	59.77
19	Carbon Disulfide	76	2.514	2.514	(0.522)	693273	100.000	88.62
20	trans-1,2-Dichloroethene	96	3.050	3.050	(0.634)	141557	50.0000	47.01
21	Vinyl Acetate	43	3.601	3.601	(0.748)	964867	100.000	111.97
22	1,1-Dichloroethane	63	3.507	3.507	(0.729)	260197	50.0000	47.27
24	2-Butanone	43	4.260	4.260	(0.885)	146222	100.000	91.26
26	2,2-Dichloropropane	77	4.174	4.174	(0.868)	192364	50.0000	50.69
27	cis-1,2-Dichloroethene	96	4.189	4.189	(0.871)	169553	50.0000	50.44

28	Chloroform	83	4.568	4.568 (0.949)	285571	50.0000	44.58
29	Bromochloromethane	128	4.463	4.463 (0.928)	95509	50.0000	48.02

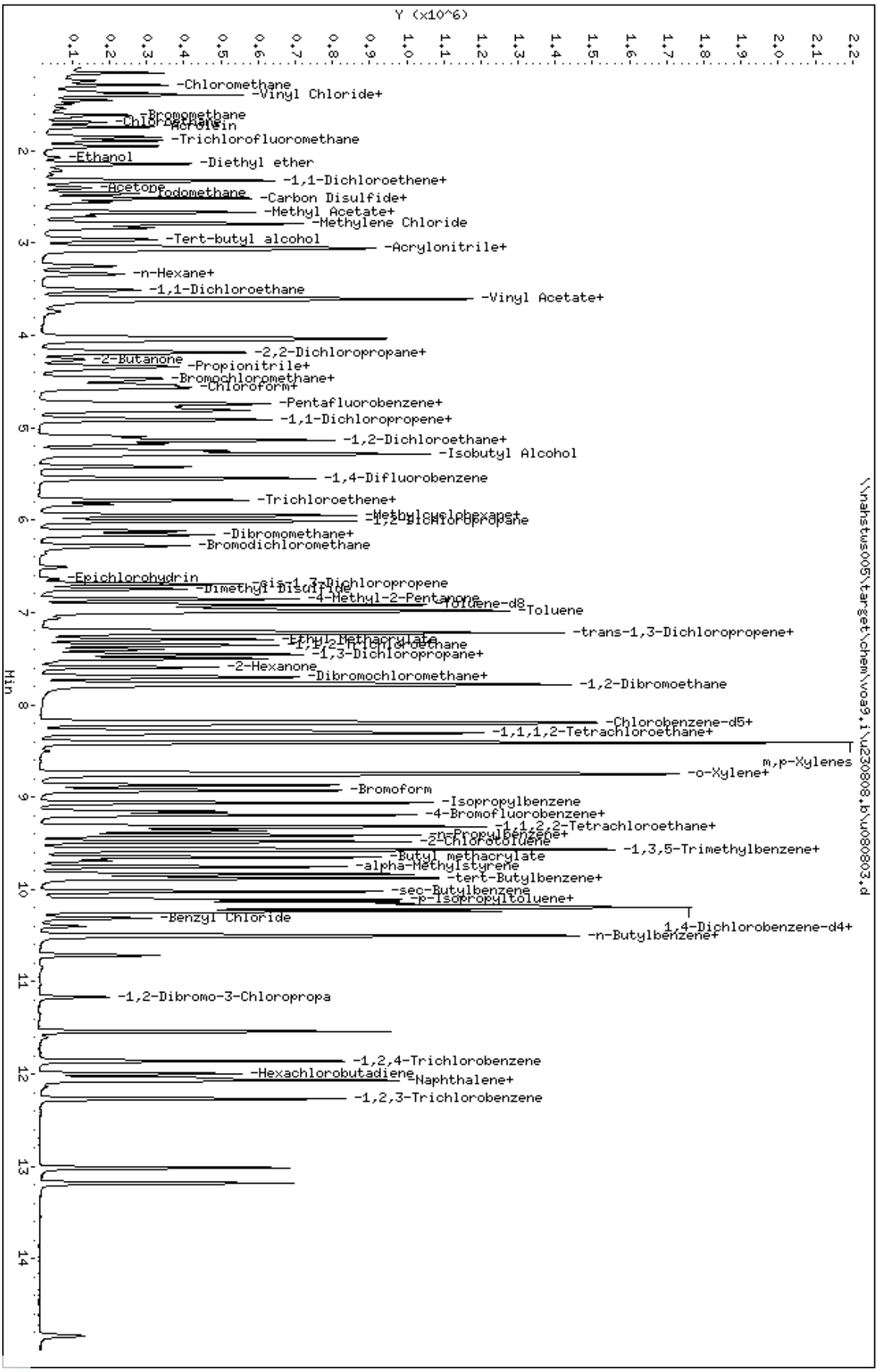
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	172773	50.0000	53.02
	31 1,1,1-Trichloroethane	97	4.737	4.737	(0.984)	225977	50.0000	45.35
	32 1,1-Dichloropropene	75	4.916	4.916	(0.886)	201865	50.0000	46.13
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	255492	50.0000	50.34
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	170272	50.0000	43.43
$	35 1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	190095	50.0000	53.60
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	589261	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	670838	50.0000	46.60
	38 Trichloroethene	130	5.786	5.786	(1.043)	188638	50.0000	46.36
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	222771	50.0000	48.38
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	183727	50.0000	47.62
	44 Dibromomethane	93	6.116	6.116	(1.102)	122491	50.0000	49.43
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	404854	100.000	96.16
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	275516	50.0000	47.07
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	565790	50.0000	
$	48 Toluene-d8	98	6.918	6.918	(0.845)	633817	50.0000	48.16
	50 Toluene	91	6.978	6.978	(0.853)	719334	50.0000	46.76
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	230619	50.0000	51.97
	52 2-Hexanone	43	7.593	7.593	(0.928)	268642	100.000	96.36
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	151880	50.0000	46.09
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	316961	50.0000	46.89
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	200784	50.0000	49.65
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	161513	50.0000	43.18
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	193456	50.0000	48.81
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	114280	50.0000	37.13
	59 Chlorobenzene	112	8.208	8.208	(1.003)	507773	50.0000	46.56
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	183868	50.0000	46.26
	61 Ethylbenzene	106	8.305	8.305	(1.015)	233325	50.0000	47.26
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	600268	100.000	103.57
	63 o-Xylene	106	8.748	8.748	(1.069)	303381	50.0000	53.50
	64 Styrene	104	8.759	8.759	(1.070)	508456	50.0000	57.47
	66 Bromoform	173	8.920	8.920	(1.090)	143328	50.0000	50.74
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	654689	50.0000	47.72
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	270379	50.0000	43.12
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	280660	50.0000	54.77
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	325510	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	251567	50.0000	46.08
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	734118	50.0000	40.40
	74 Bromobenzene	156	9.317	9.317	(0.916)	246907	50.0000	45.85
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	536278	50.0000	47.14
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	506930	50.0000	44.17
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	585825	50.0000	45.70
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	464349	50.0000	43.08
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	561506	50.0000	48.74
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	580938	50.0000	47.45
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	525618	50.0000	51.44
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	397974	50.0000	44.27
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	423493	50.0000	42.51
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	439268	50.0000	40.51
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	407799	50.0000	44.22
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	42417	50.0000	46.92
	90 1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	271738	50.0000	47.90

91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	110466	50.0000	52.95
92 Naphthalene	128	12.065	12.065 (1.187)	690647	50.0000	46.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	267942	50.0000	46.26
M 94	1,2-Dichloroethylene (total)	96				311110	100.000	97.45
M 95	Xylenes (total)	106				903649	150.000	157.08
135	1,4-Dioxane	88	6.169	6.169	(1.282)	51506	1000.00	880.84
141	Cyclohexane	56	4.778	4.778	(0.993)	168410	50.0000	36.74
138	Freon TF	101	2.326	2.326	(0.484)	103322	50.0000	47.50
140	1,3-Butadiene	54	1.393	1.393	(0.290)	142538	50.0000	43.89
147	Methylcyclohexane	55	5.944	5.944	(1.071)	427993	50.0000	49.86
146	Methyl Acetate	43	2.705	2.705	(0.562)	142322	50.0000	48.63
148	Tert-Butyl alcohol	59	2.960	2.960	(0.615)	351217	1000.00	1024.43
149	Isopropyl Alcohol	45	2.555	2.555	(0.531)	212736	1000.00	943.90
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	40839	50.0000	53.37
12	Isobutyl Alcohol	43	5.284	5.284	(1.098)	592191	1000.00	1025.22
13	Acetonitrile	39	2.664	2.664	(0.554)	191210	500.000	507.56
14	Allyl Chloride	41	2.664	2.664	(0.554)	423180	50.0000	49.18
25	Methacrylonitrile	41	4.489	4.489	(0.933)	112687	50.0000	49.20
40	Methyl Methacrylate	41	6.154	6.154	(1.279)	182345	50.0000	51.74
4	Propionitrile	54	4.332	4.332	(0.900)	251090	500.000	518.60
131	Methyl Acrylate	55	4.362	4.362	(0.907)	198553	50.0000	50.89
182	Epichlorohydrin	57	6.633	6.633	(1.195)	9456	200.000	260.93(M)

QC Flag Legend

M - Compound response manually integrated.



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Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

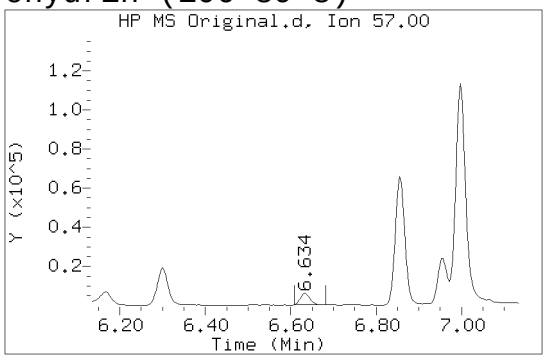
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Operator: PC
Column diameter: 0.18

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InstruID : VOA9.i
LabSampID : CCV

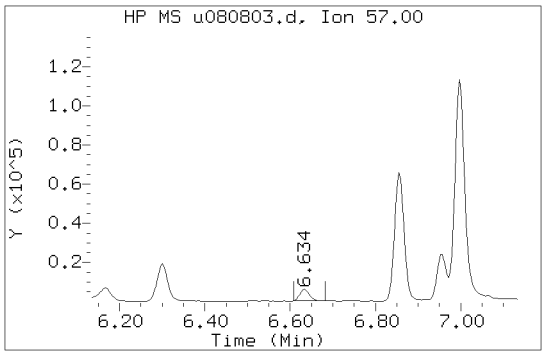
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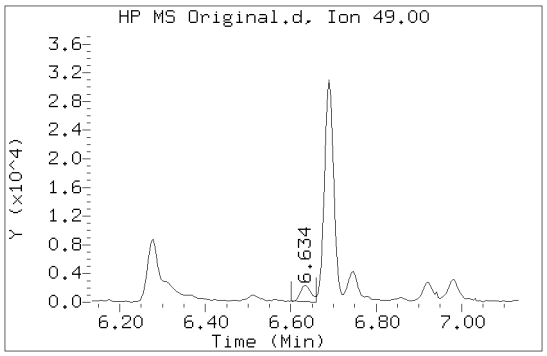
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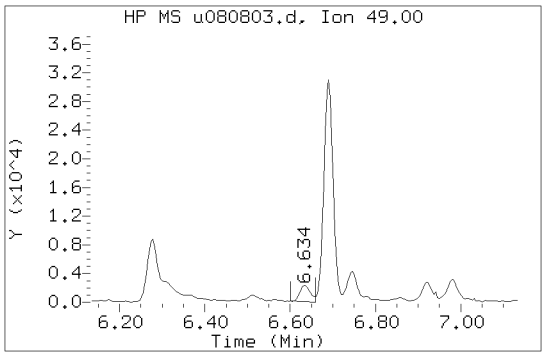
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BEFORE
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HEIGHT
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08-Aug-2023
22:26



AFTER
MASS
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08-Aug-2023
22:26



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080804.D Page 1
Report Date: 08-Aug-2023 22:27

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080804.D
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Inj Date : 08-AUG-2023 12:00
Operator : PC Inst ID: VOA9.i
Smp Info : CCB;CCB;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 22:23 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.812	(1.000)	463774	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.744	(0.986)	186262	50.2195	50.21
$ 35 1,2-Dichloroethane-d4	65	5.100	5.093	(1.059)	222714	55.2691	55.26
* 36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	623952	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	560023	50.0000	
$ 48 Toluene-d8	98	6.922	6.918	(0.846)	687504	52.7806	52.78
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	250043	49.1610	49.16
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	305007	50.0000	

01248526

Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080804.d

Page 1

Date : 08-AUG-2023 12:00

Client ID: CCB

Instrument: VOA9.i

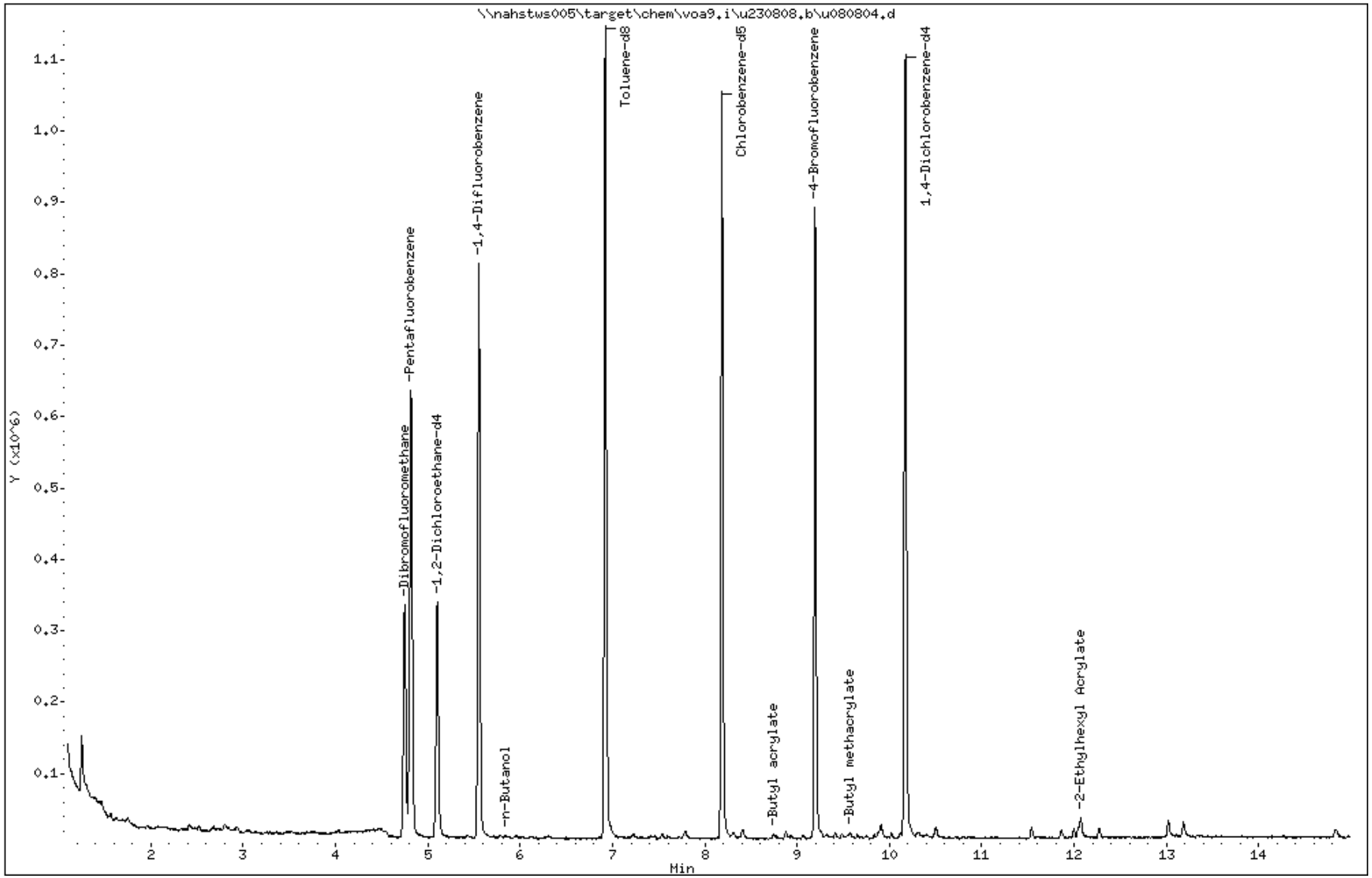
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Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 08-AUG-2023 12:00
InstruID : VOA9.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U230808.b\U080805.D Page 1
Report Date: 08-Aug-2023 12:38

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U230808.b\U080805.D
Lab Smp Id: VLCSW-230808 Client Smp ID: VLCSW-230808
Inj Date : 08-AUG-2023 12:22
Operator : PC Inst ID: VOA9.i
Smp Info : VLCSW-230808;VLCSW-230808;3;;LCS
Misc Info : V9;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 11:53 pcabasca Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.812	(1.000)	430680	50.0000	
2 Dichlorodifluoromethane	85	1.160	1.157	(0.241)	69536	17.7004	17.70
3 Chloromethane	50	1.295	1.288	(0.269)	91845	17.9500	17.95
5 Vinyl Chloride	62	1.374	1.366	(0.285)	73053	17.2280	17.22
6 Bromomethane	94	1.617	1.610	(0.336)	49243	20.6051	20.60
7 Chloroethane	64	1.696	1.689	(0.352)	49210	18.4290	18.42
8 Trichlorofluoromethane	101	1.891	1.888	(0.393)	99412	18.9952	18.99
9 Acrolein	56	1.745	1.741	(0.362)	7839	28.3763	28.37
10 Acetone	43	2.405	2.401	(0.499)	61104	40.8665	40.86
11 1,1-Dichloroethene	96	2.330	2.322	(0.484)	56224	19.8146	19.81
15 Iodomethane	142	2.465	2.461	(0.512)	101953	40.8077	40.80
16 Acrylonitrile	53	3.064	3.057	(0.636)	53505	39.5232	39.52
17 Methylene Chloride	84	2.791	2.787	(0.580)	69286	19.9845	19.98
18 Methyl tert-butyl ether	73	3.079	3.072	(0.640)	189653	21.6246	21.62
19 Carbon Disulfide	76	2.517	2.514	(0.523)	296363	35.8771	35.87
20 trans-1,2-Dichloroethene	96	3.057	3.050	(0.635)	61072	19.2065	19.20
21 Vinyl Acetate	43	3.604	3.601	(0.749)	375819	41.2982	41.29
22 1,1-Dichloroethane	63	3.511	3.507	(0.729)	108534	18.6741	18.67
24 2-Butanone	43	4.268	4.260	(0.886)	62359	36.8560	36.85
26 2,2-Dichloropropane	77	4.178	4.174	(0.868)	81063	20.2287	20.22

27	cis-1,2-Dichloroethene	96	4.193	4.189 (0.871)	72461	20.4150	20.41
28	Chloroform	83	4.571	4.568 (0.949)	126388	18.6864	18.68

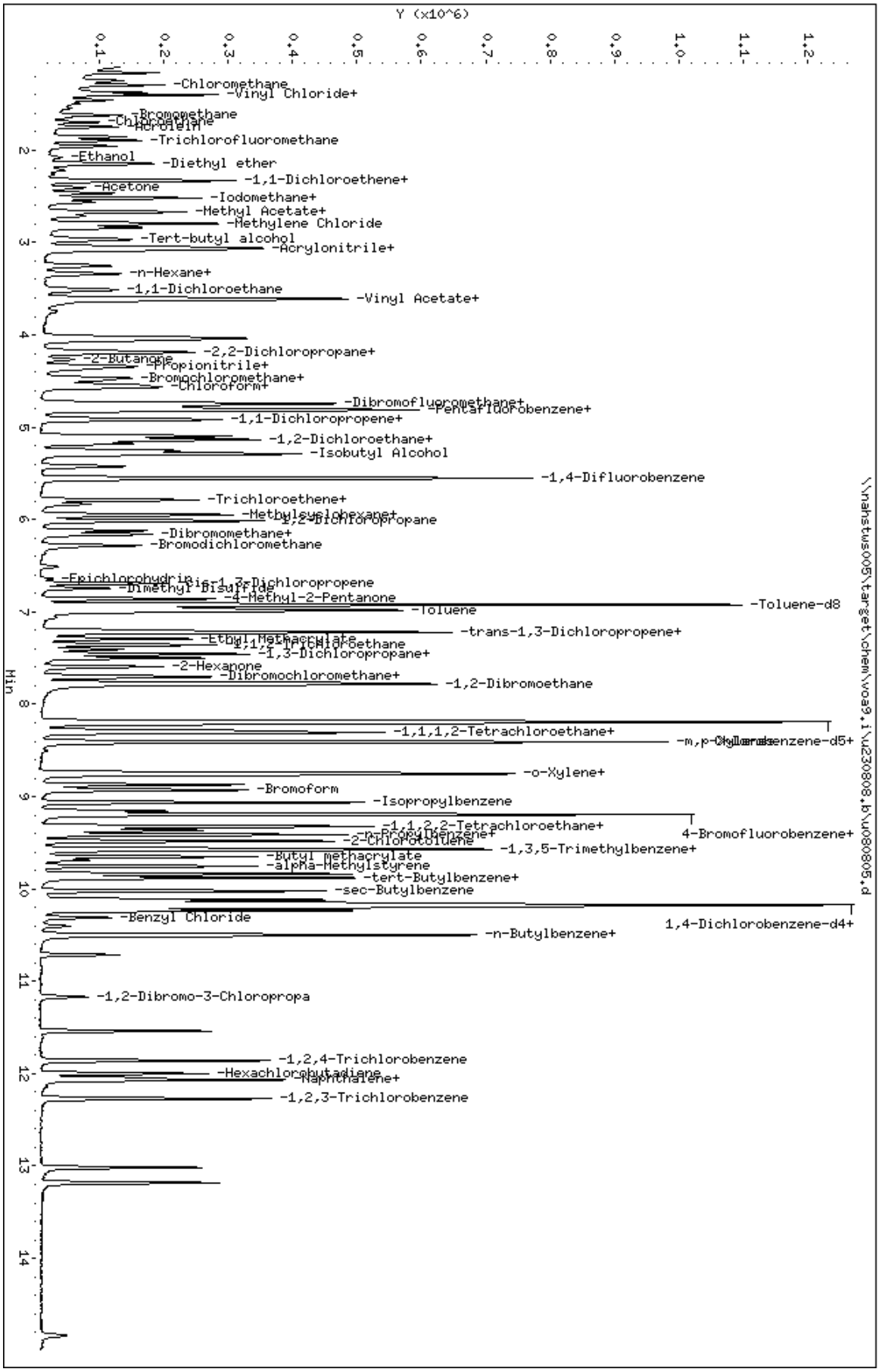
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.466	4.463	(0.928)	39072	18.6032	18.60
$	30 Dibromofluoromethane	113	4.748	4.744	(0.986)	178480	51.8508	51.85
	31 1,1,1-Trichloroethane	97	4.740	4.737	(0.984)	100010	19.0059	19.00
	32 1,1-Dichloropropene	75	4.920	4.916	(0.887)	89267	19.8264	19.82
	33 1,2-Dichloroethane	62	5.175	5.171	(0.932)	106534	20.4026	20.40
	34 Carbon Tetrachloride	117	4.909	4.905	(0.885)	74488	18.4673	18.46
$	35 1,2-Dichloroethane-d4	65	5.096	5.093	(1.058)	196043	52.3191	52.31
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	606353	50.0000	
	37 Benzene	78	5.137	5.134	(0.926)	291973	19.7123	19.71
	38 Trichloroethene	130	5.786	5.786	(1.043)	84853	20.2690	20.26
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	90304	19.0626	19.06
	42 1,2-Dichloropropane	63	6.011	6.007	(1.083)	75381	18.9890	18.98
	44 Dibromomethane	93	6.120	6.116	(1.103)	49249	19.3152	19.31
	45 4-Methyl-2-Pentanone	43	6.858	6.855	(0.838)	164123	38.5513	38.55
	46 cis-1,3-Dichloropropene	75	6.689	6.690	(1.205)	100183	18.0604	18.06
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	572160	50.0000	
$	48 Toluene-d8	98	6.922	6.918	(0.846)	660649	49.6430	49.64
	50 Toluene	91	6.982	6.978	(0.853)	312794	20.1077	20.10
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.297)	86311	18.9026	18.90
	52 2-Hexanone	43	7.593	7.593	(0.928)	109750	38.9312	38.93
	53 1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	62967	18.8991	18.89
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	130481	19.0917	19.09
	55 Dibromochloromethane	129	7.694	7.691	(0.940)	77338	18.9148	18.91
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	72419	19.1483	19.14
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	80876	20.1785	20.17
	58 1-Chlorohexane	55	8.196	8.197	(1.477)	59817	18.8918	18.89
	59 Chlorobenzene	112	8.211	8.208	(1.003)	218489	19.8131	19.81
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	75262	18.7257	18.72
	61 Ethylbenzene	106	8.305	8.305	(1.015)	104847	21.0020	21.00
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	268743	45.8547	45.85
	63 o-Xylene	106	8.747	8.748	(1.069)	131890	23.0032	23.00
	64 Styrene	104	8.762	8.759	(1.071)	210216	23.4961	23.49
	66 Bromoform	173	8.920	8.920	(1.090)	53478	18.7215	18.72
	67 Isopropylbenzene	105	9.062	9.063	(1.107)	310193	22.3581	22.35
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	113534	18.0988	18.09
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	284262	54.8598	54.85
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	325675	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	101131	18.5164	18.51
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	344547	19.8243	19.82
	74 Bromobenzene	156	9.317	9.317	(0.916)	104220	19.3437	19.34
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	248054	21.7942	21.79
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	236207	20.5725	20.57
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	267800	20.8812	20.88
	78 tert-Butylbenzene	119	9.838	9.835	(0.967)	222353	20.6213	20.62
	79 1,2,4-Trimethylbenzene	105	9.880	9.876	(0.971)	257372	22.3303	22.33
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	289055	25.0315	25.03
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	251467	26.3843	26.38
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	178256	19.8229	19.82
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	192107	19.2781	19.27
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	208563	20.4842	20.48
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	184097	19.9535	19.95
	89 1,2-Dibromo-3-Chloropropane	155	11.169	11.166	(1.098)	16483	18.2250	18.22

90 1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	117344	20.6749	20.67
91 Hexachlorobutadiene	225	11.998	11.998 (1.179)	53368	27.3123	27.31

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	92 Naphthalene	128	12.069	12.065	(1.186)	272989	19.2231	19.22
	93 1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	117713	20.3150	20.31
M	94 1,2-Dichloroethylene (total)	96				133533	39.6215	39.62
M	95 Xylenes (total)	106				400633	68.8579	68.85
	135 1,4-Dioxane	88	6.172	6.169	(1.282)	20527	332.419	332.41
	141 Cyclohexane	56	4.778	4.778	(0.992)	91610	18.9253	18.92
	138 Freon TF	101	2.330	2.326	(0.484)	51664	23.5895	23.58
	140 1,3-Butadiene	54	1.400	1.393	(0.291)	61253	17.8619	17.86
	147 Methylcyclohexane	55	5.947	5.944	(1.072)	153333	17.3614	17.36
	146 Methyl Acetate	43	2.712	2.705	(0.563)	58198	18.8323	18.83
	148 Tert-Butyl alcohol	59	2.967	2.960	(0.616)	148343	407.855	407.85
	149 Isopropyl Alcohol	45	2.562	2.555	(0.532)	84930	356.835	356.83
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	16120	20.8349	20.83
	12 Isobutyl Alcohol	43	5.287	5.284	(1.098)	235336	385.802	385.80
	13 Acetonitrile	39	2.667	2.664	(0.554)	74953	188.401	188.40
	14 Allyl Chloride	41	2.671	2.664	(0.555)	169050	18.6036	18.60
	25 Methacrylonitrile	41	4.496	4.489	(0.934)	42084	17.3996	17.39
	40 Methyl Methacrylate	41	6.157	6.154	(1.279)	68250	18.3406	18.34
	4 Propionitrile	54	4.339	4.332	(0.901)	102887	201.228	201.22(a)
	136 n-Hexane	57	3.338	3.335	(0.693)	58424	18.6877	18.68
	131 Methyl Acrylate	55	4.369	4.362	(0.907)	79044	19.1847	19.18
	200 Dimethyl Disulfide	94	6.746	6.746	(0.824)	50938	15.2419	15.24
	49 Ethyl Methacrylate	69	7.293	7.293	(1.314)	109773	19.7439	19.74
	166 1,2,3-Trimethylbenzene	105	10.236	10.232	(1.006)	256179	22.0375	22.03
	167 Ethanol	45	2.082	2.071	(0.433)	16342	353.682	353.68
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	250330	18.1328	18.13
	145 alpha-Methylstyrene	118	9.756	9.752	(0.959)	99339	19.9132	19.91
	142 Tetrahydrofuran	42	4.545	4.538	(0.944)	25916	35.9608	35.96
	156 Diisopropyl ether	45	3.619	3.616	(0.752)	204880	20.1333	20.13
	151 4-Methyl-2-pentanol	45	7.222	7.218	(1.301)	353769	448.689	448.68
	150 Allyl alcohol	57	3.338	3.335	(0.693)	58424	503.806	503.80
	86 Benzyl Chloride	91	10.311	10.311	(1.260)	70174	20.0109	20.01
	162 Butyl acrylate	55	8.736	8.733	(1.067)	130277	19.4763	19.47
	139 Diethyl ether	59	2.142	2.135	(0.445)	50734	20.8053	20.80
	203 2-Ethylhexyl Acrylate	55	12.043	12.043	(1.184)	54280	17.4022	17.40
	134 Cyclohexanone	55	9.156	9.153	(0.900)	75852	376.705	376.70(a)
	130 Ethyl Acetate	43	4.343	4.335	(0.902)	72164	18.5305	18.53
	189 n-Butyl acetate	43	7.709	7.706	(0.942)	121065	19.1682	19.16
	182 Epichlorohydrin	57	6.633	6.633	(1.195)	3043	93.9541	93.95
	132 n-Butanol	56	5.835	5.827	(1.212)	39504	343.981	343.98(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.235)	153333	17.2744	17.27
	163 Butyl methacrylate	41	9.651	9.651	(0.949)	84784	20.6782	20.67

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).



Data File: \\nahstws005\target\chem\voa9,i\u230808,b\u080805,d
Date : 08-AUG-2023 12:22
Client ID: VLCSW-230808
Sample Info: VLCSW-230808;VLCSW-230808;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u230808.b\u080805.d
Inj Date : 08-AUG-2023 12:22
InstruID : VOA9.i
LabSampID : VLCSW-230808

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U230808.b\U080807.D
Lab Smp Id: VBLKW-230808 Client Smp ID: VBLKW-230808
Inj Date : 08-AUG-2023 13:17
Operator : PC Inst ID: VOA9.i
Smp Info : VBLKW-230808;VBLKW-230808;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 11:53 pcabasca Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.808	4.812	(1.000)	431269	50.0000	
	2 Dichlorodifluoromethane	85	1.025	1.157	(0.213)	4323	2.27790	2.27(a)
	3 Chloromethane	50	1.007	1.288	(0.209)	79936	15.5558	15.55
	5 Vinyl Chloride	62	1.025	1.366	(0.213)	5869	1.38219	1.38(a)
	7 Chloroethane	64	1.235	1.689	(0.257)	108169	40.4536	40.45
	15 Iodomethane	142	2.457	2.461	(0.511)	2290	4.27004	4.27(a)
$	30 Dibromofluoromethane	113	4.740	4.744	(0.986)	171586	49.7401	49.74
	32 1,1-Dichloropropene	75	4.808	4.916	(0.866)	23755	5.11770	5.11
	33 1,2-Dichloroethane	62	5.550	5.171	(1.000)	19667	3.65345	3.65(a)
	34 Carbon Tetrachloride	117	4.808	4.905	(0.866)	36701	8.82598	8.82
$	35 1,2-Dichloroethane-d4	65	5.093	5.093	(1.059)	219423	58.6361	58.63
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	625112	50.0000	
	42 1,2-Dichloropropane	63	5.546	6.007	(0.999)	116031	28.3518	28.35
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	566691	50.0000	
$	48 Toluene-d8	98	6.922	6.918	(0.846)	692912	52.5698	52.56
	58 1-Chlorohexane	55	8.185	8.197	(1.475)	5094	1.56054	1.56(a)
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	245453	47.6493	47.64
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	306722	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	116585	22.6649	22.66
	141 Cyclohexane	56	4.804	4.778	(0.999)	6541	1.34943	1.34(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

01248538

Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080807.d

Page 1

Date : 08-AUG-2023 13:17

Client ID: VBLKW-230808

Instrument: VOA9.i

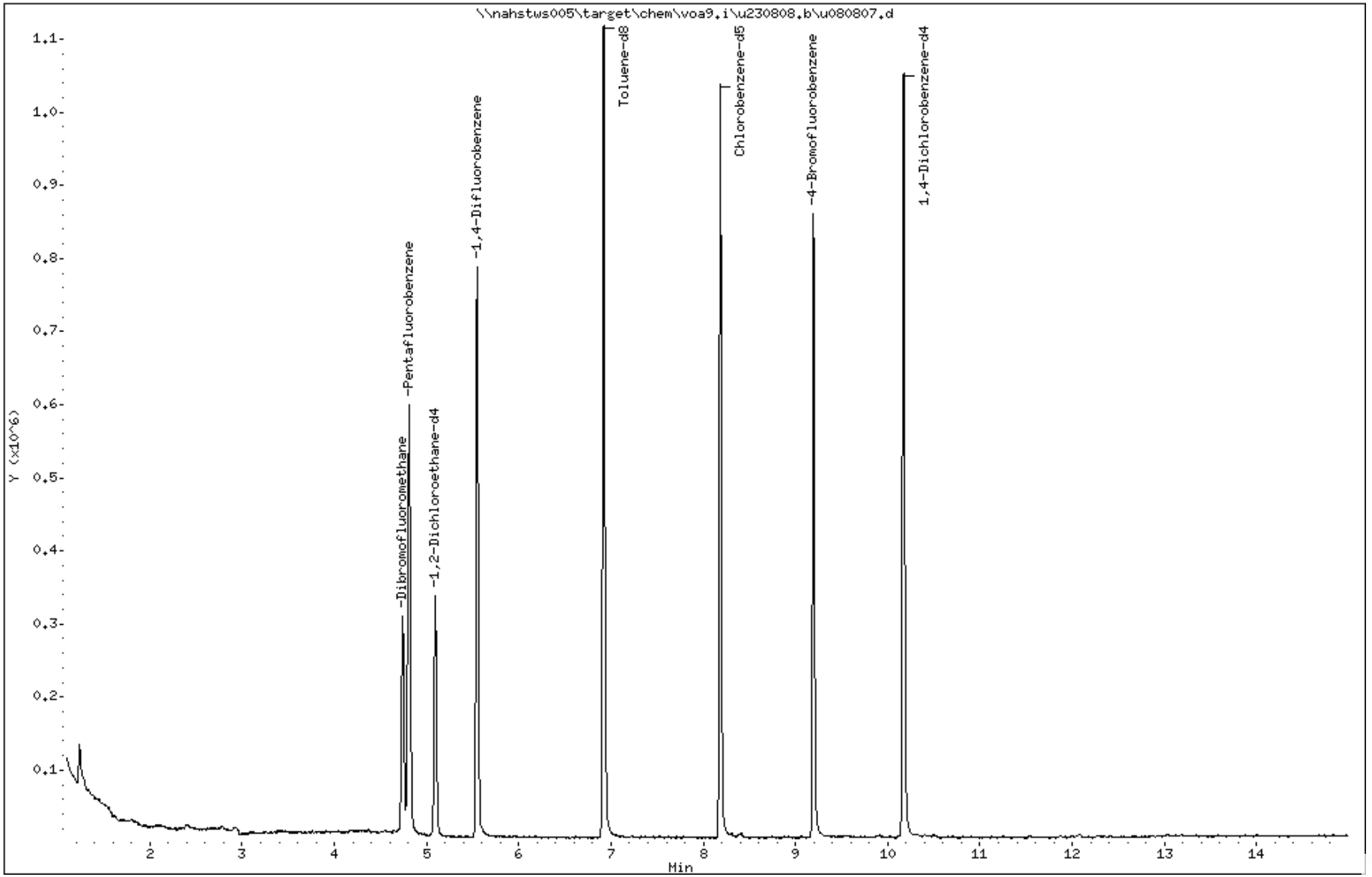
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Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\nahstws005\target\chem\voa9.i\u230808.b\u080807.d
Inj Date : 08-AUG-2023 13:17
InstruID : VOA9.i
LabSampID : VBLKW-230808

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080808.D Page 1
Report Date: 08-Aug-2023 22:28

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080808.D
Lab Smp Id: HS23080101-03 Client Smp ID: HS23080101-03
Inj Date : 08-AUG-2023 13:39
Operator : PC Inst ID: VOA9.i
Smp Info : HS23080101-03;HS23080101-03;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 22:23 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.812	(1.000)	435759	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.744	(0.986)	178401	51.2117	51.21
$ 35 1,2-Dichloroethane-d4	65	5.096	5.093	(1.058)	214621	56.7192	56.71
* 36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	600572	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	559190	50.0000	
$ 48 Toluene-d8	98	6.922	6.918	(0.846)	668199	51.3749	51.37
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	239752	47.1528	47.15
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	297260	50.0000	

01248541

Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080808.d

Page 1

Date : 08-AUG-2023 13:39

Client ID: HS23080101-03

Instrument: VOA9.i

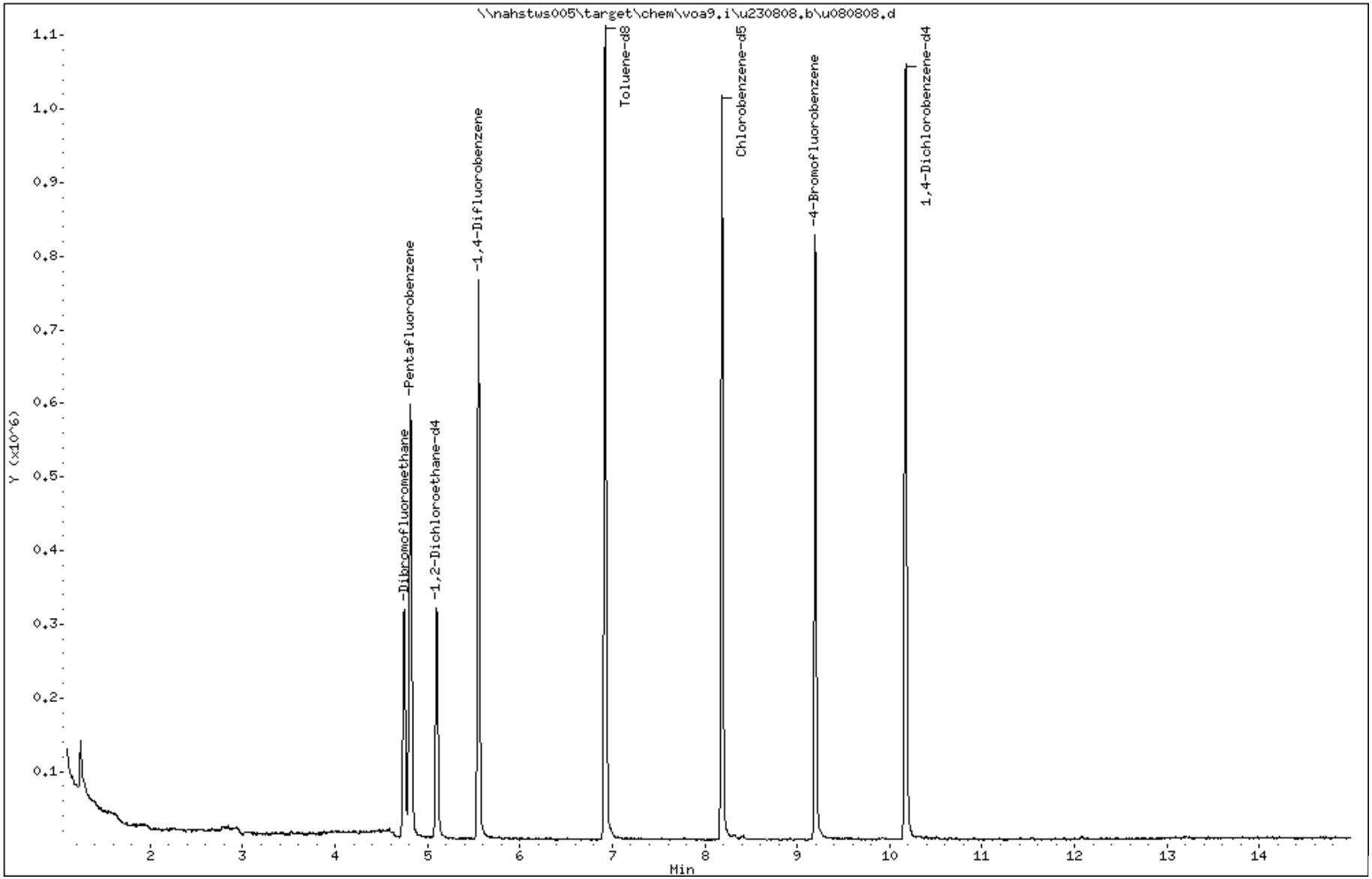
Sample Info: HS23080101-03;HS23080101-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\nahstws005\target\chem\voa9.i\u230808.b\u080808.d
Inj Date : 08-AUG-2023 13:39
InstruID : VOA9.i
LabSampID : HS23080101-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080811.D Page 1
Report Date: 08-Aug-2023 22:30

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080811.D
Lab Smp Id: HS23080101-01 Client Smp ID: HS23080101-01
Inj Date : 08-AUG-2023 14:46
Operator : PC Inst ID: VOA9.i
Smp Info : HS23080101-01;HS23080101-01;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 22:23 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.812	(1.000)	407242	50.0000	
	27 cis-1,2-Dichloroethene	96	4.196	4.189	(0.872)	11756	3.50274	3.50(a)
$	30 Dibromofluoromethane	113	4.747	4.744	(0.986)	174790	53.7367	53.73
$	35 1,2-Dichloroethane-d4	65	5.100	5.093	(1.059)	208380	58.9781	58.97(M)
*	36 1,4-Difluorobenzene	114	5.553	5.550	(1.000)	546286	50.0000	
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	538112	50.0000	
$	48 Toluene-d8	98	6.922	6.918	(0.846)	646813	51.6786	51.67
$	69 4-Bromofluorobenzene	95	9.193	9.194	(1.123)	234274	47.9016	47.90
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	290940	50.0000	
M	94 1,2-Dichloroethylene (total)	96				11756	3.50274	3.50(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01248544

Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080811.d

Date : 08-AUG-2023 14:46

Client ID: HS23080101-01

Instrument: VOA9.i

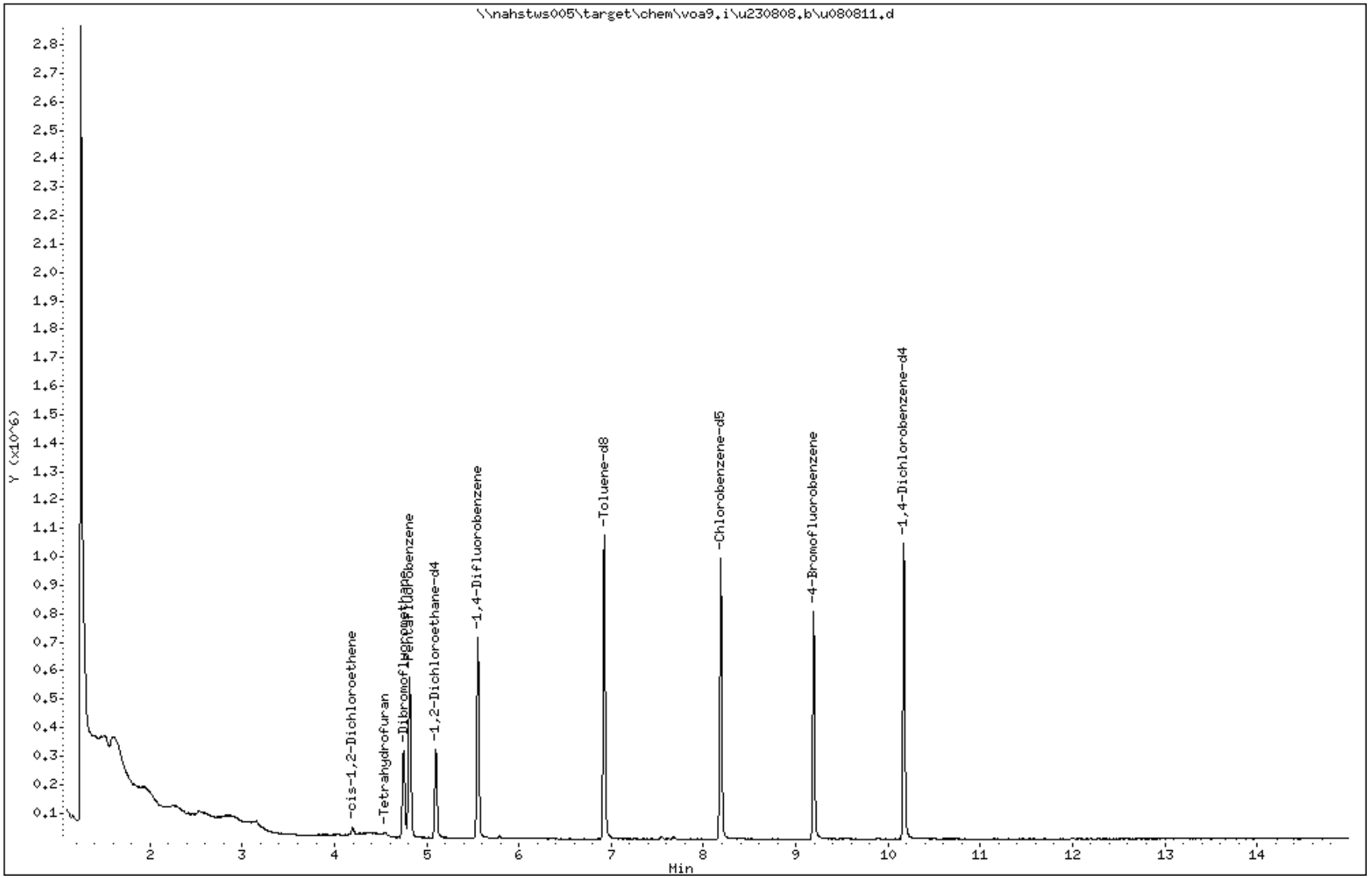
Sample Info: HS23080101-01;HS23080101-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080811.d

Date : 08-AUG-2023 14:46

Client ID: HS23080101-01

Instrument: VOA9.i

Sample Info: HS23080101-01;HS23080101-01;;;

Purge Volume: 5.0

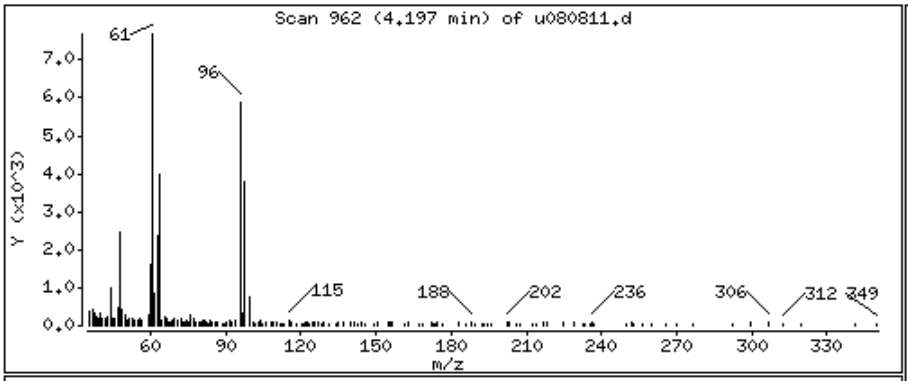
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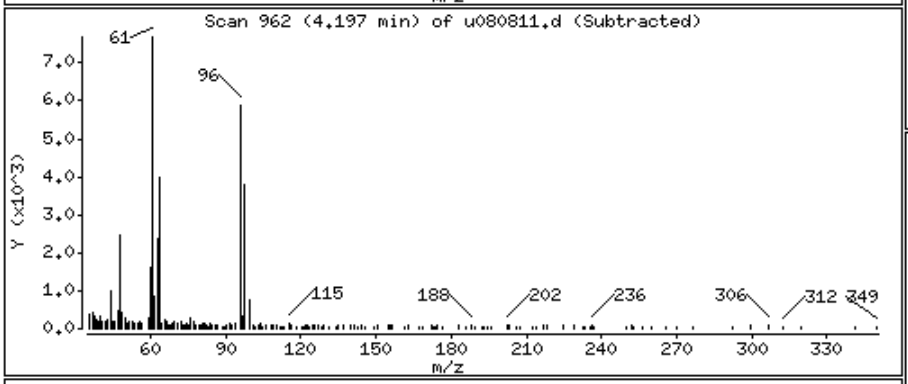
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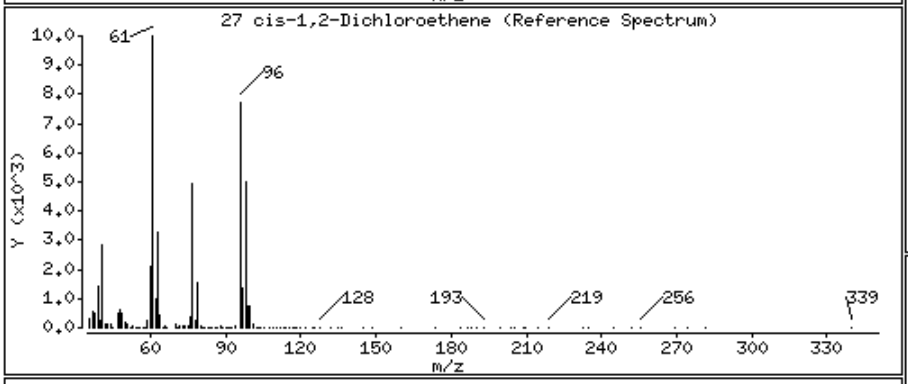
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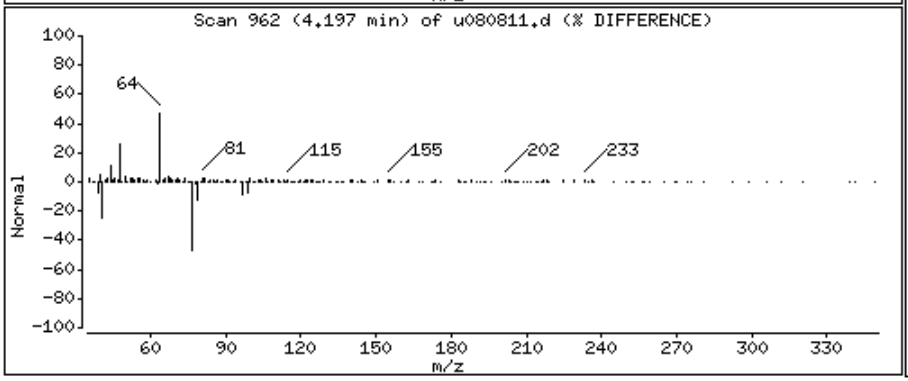
27 cis-1,2-Dichloroethene

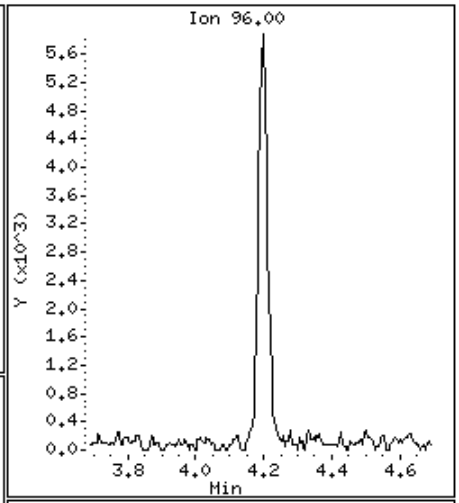
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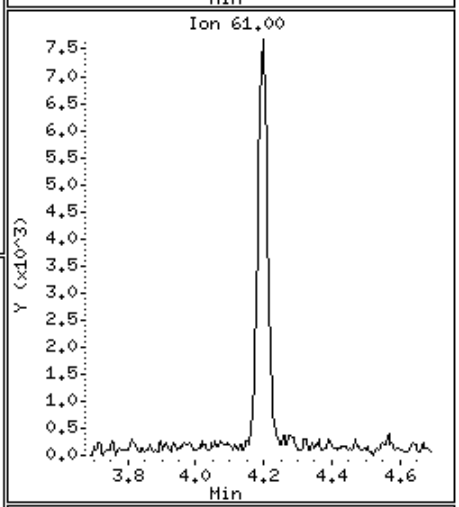


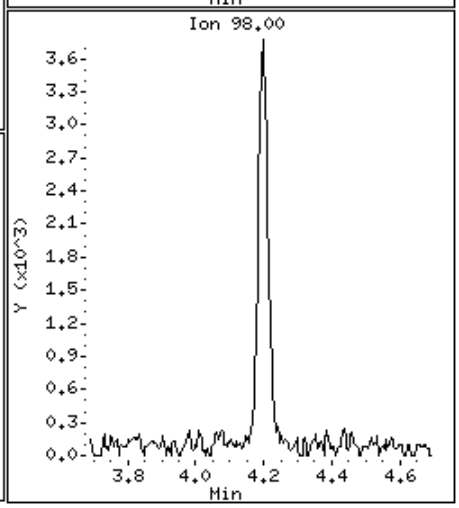












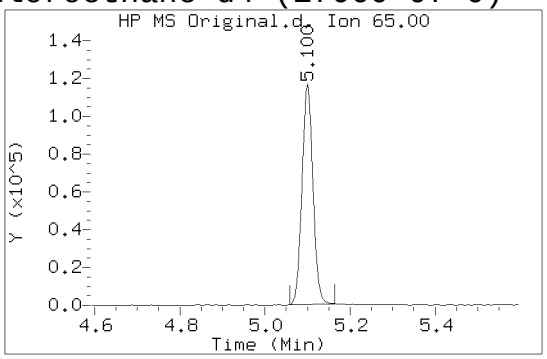
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Inj Date : 08-AUG-2023 14:46
InstruID : VOA9.i
LabSampID : HS23080101-01

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

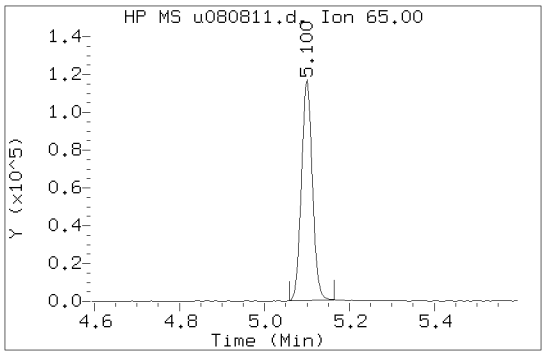
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22:30



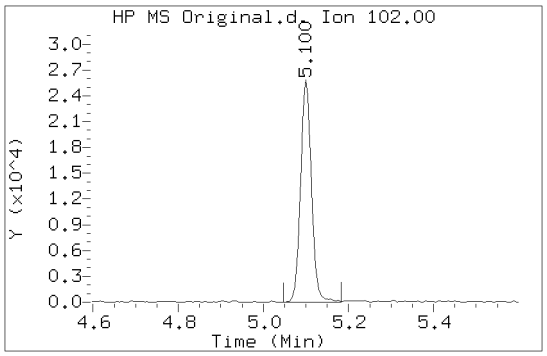
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08-Aug-2023
22:30



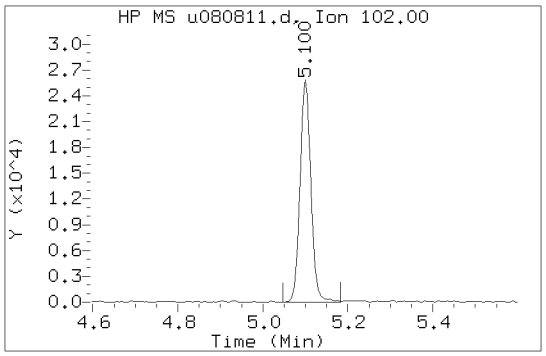
BEFORE

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HEIGHT
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08-Aug-2023
22:30



AFTER

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45718
HEIGHT
25856
08-Aug-2023
22:30



Data File: \\nahstws005\Target\chem\voa9.i\U230808.b\U080814.D Page 1
Report Date: 08-Aug-2023 16:09

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Data file : \\nahstws005\Target\chem\voa9.i\U230808.b\U080814.D
Lab Smp Id: HS23080101-01MS Client Smp ID: HS23080101-01MS
Inj Date : 08-AUG-2023 15:53
Operator : PC Inst ID: VOA9.i
Smp Info : HS23080101-01MS;HS23080101-01MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 11:53 pcabasca Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 13 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.811	(1.000)	405384	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.160	(0.243)	81475	21.7258	21.72
3 Chloromethane	50	1.303	1.295	(0.271)	96153	20.0035	20.00
5 Vinyl Chloride	62	1.378	1.374	(0.286)	87114	21.8259	21.82
6 Bromomethane	94	1.621	1.614	(0.337)	34986	15.1505	15.15
7 Chloroethane	64	1.250	1.696	(0.260)	3433604	1366.11	1366.11(A)
8 Trichlorofluoromethane	101	1.899	1.891	(0.394)	120739	24.5098	24.50
9 Acrolein	56	1.753	1.749	(0.364)	11476	44.1341	44.13
10 Acetone	43	2.412	2.405	(0.501)	48898	33.5190	33.51
11 1,1-Dichloroethene	96	2.334	2.330	(0.485)	61459	23.0110	23.01
15 Iodomethane	142	2.472	2.465	(0.513)	194505	77.4149	77.41
16 Acrylonitrile	53	3.068	3.061	(0.637)	53659	42.1103	42.11
17 Methylene Chloride	84	2.798	2.791	(0.581)	66911	20.5088	20.50
18 Methyl tert-butyl ether	73	3.083	3.076	(0.640)	186626	22.6073	22.60
19 Carbon Disulfide	76	2.521	2.517	(0.524)	391441	50.3440	50.34
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.636)	64139	21.4297	21.42
21 Vinyl Acetate	43	3.612	3.604	(0.750)	371302	43.3479	43.34
22 1,1-Dichloroethane	63	3.518	3.511	(0.731)	112158	20.5018	20.50
24 2-Butanone	43	4.272	4.264	(0.887)	59815	37.5584	37.55
26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	94236	24.9833	24.98

27	cis-1,2-Dichloroethene	96	4.197	4.193 (0.872)	82507	24.6959	24.69
28	Chloroform	83	4.575	4.571 (0.950)	129891	20.4027	20.40

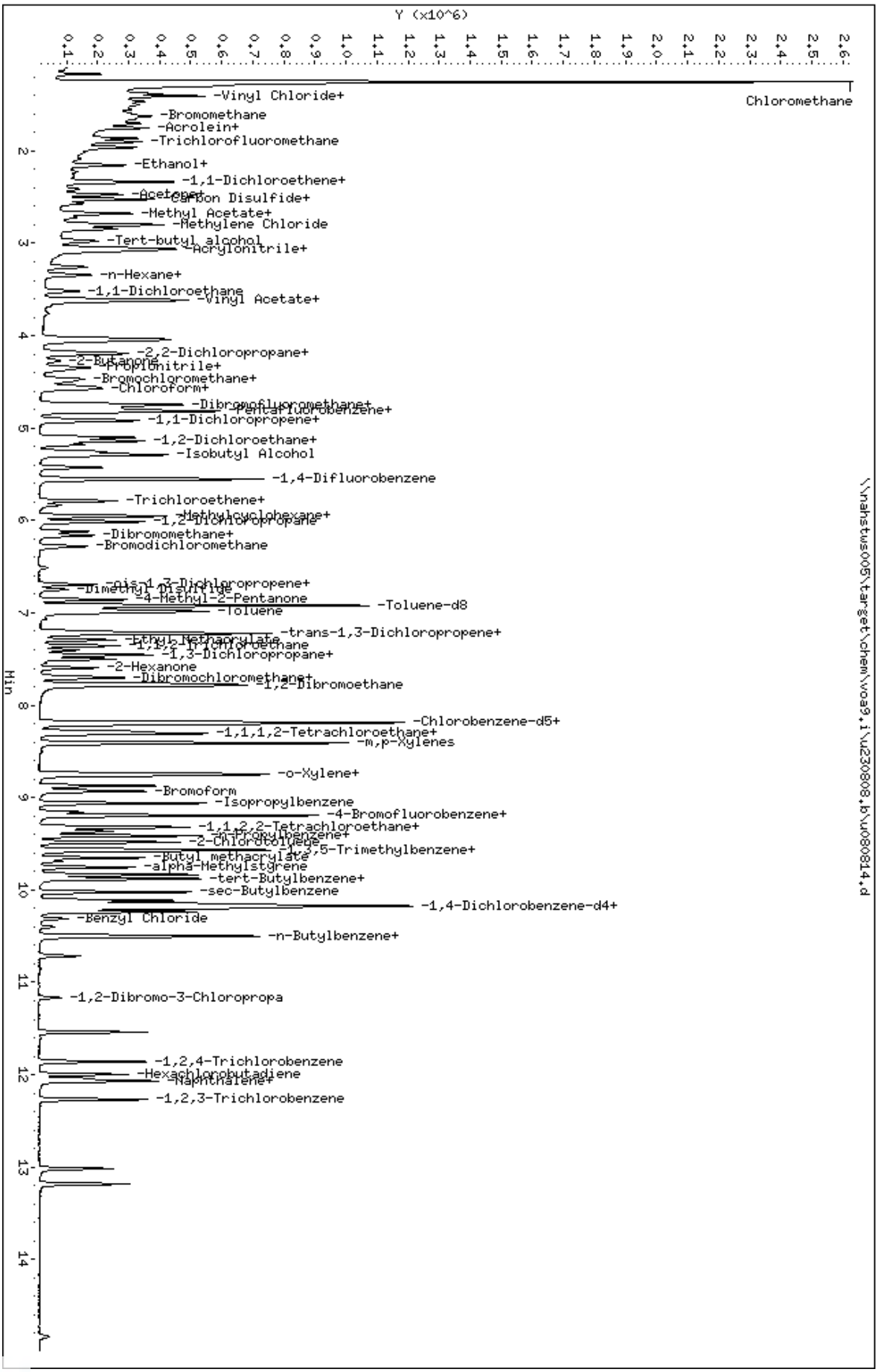
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.466	(0.928)	38408	19.4282	19.42
$	30 Dibromofluoromethane	113	4.748	4.744	(0.986)	170567	52.6592	52.65
	31 1,1,1-Trichloroethane	97	4.744	4.740	(0.985)	113778	22.9716	22.97
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	94527	23.3485	23.34
	33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	110500	23.5348	23.53
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	94467	26.0465	26.04
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.059)	209146	59.4773	59.47
*	36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	545222	50.0000	
	37 Benzene	78	5.138	5.137	(0.925)	280028	21.0256	21.02
	38 Trichloroethene	130	5.790	5.786	(1.043)	82313	21.8668	21.86
	39 Bromodichloromethane	83	6.281	6.277	(1.131)	89132	20.9247	20.92
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	72972	20.4432	20.44
	44 Dibromomethane	93	6.120	6.120	(1.102)	47310	20.6351	20.63
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	162122	42.8835	42.88
	46 cis-1,3-Dichloropropene	75	6.693	6.689	(1.205)	92456	18.4781	18.47
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	508088	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	633154	53.5766	53.57
	50 Toluene	91	6.982	6.982	(0.853)	303134	21.9441	21.94
	51 trans-1,3-Dichloropropene	75	7.199	7.195	(1.296)	79165	19.2815	19.28
	52 2-Hexanone	43	7.593	7.593	(0.928)	112155	44.8013	44.80
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	58603	19.8074	19.80
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	123479	20.3456	20.34
	55 Dibromochloromethane	129	7.691	7.694	(0.940)	74463	20.5082	20.50
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	78872	23.4844	23.48
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	76358	21.4537	21.45
	58 1-Chlorohexane	55	8.197	8.196	(1.476)	68306	23.9916	23.99
	59 Chlorobenzene	112	8.208	8.208	(1.003)	205649	21.0005	21.00
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	73529	20.6016	20.60
	61 Ethylbenzene	106	8.305	8.305	(1.015)	102224	23.0587	23.05
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	263731	50.6741	50.67
	63 o-Xylene	106	8.748	8.747	(1.069)	128810	25.2991	25.29
	64 Styrene	104	8.763	8.762	(1.071)	190026	23.9178	23.91
	66 Bromoform	173	8.920	8.920	(1.090)	51755	20.4031	20.40
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	319263	25.9138	25.91
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.328	(0.917)	104418	17.8321	17.83
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	248872	54.0670	54.06
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	304006	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	93651	18.3691	18.36
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	362776	22.1510	22.15
	74 Bromobenzene	156	9.317	9.317	(0.916)	94546	18.7989	18.79
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	255654	24.0629	24.06
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	227536	21.2298	21.22
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	271090	22.6444	22.64
	78 tert-Butylbenzene	119	9.835	9.838	(0.967)	234086	23.2569	23.25
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	267578	24.8706	24.87
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	300709	27.7517	27.75
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	263146	29.3998	29.39
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	174981	20.8457	20.84
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	180021	19.3529	19.35
	87 n-Butylbenzene	91	10.495	10.491	(1.032)	222161	23.0375	23.03
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	175258	20.3495	20.34
	89 1,2-Dibromo-3-Chloropropane	155	11.169	11.169	(1.098)	15238	18.0493	18.04

90 1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	111455	21.0370	21.03
91 Hexachlorobutadiene	225	11.998	11.998 (1.179)	55012	30.0412	30.04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
92	Naphthalene	128	12.069	12.065	(1.186)	279008	20.8963	20.89
93	1,2,3-Trichlorobenzene	180	12.271	12.267	(1.206)	113364	20.9590	20.95
M 94	1,2-Dichloroethylene (total)	96				146646	46.1256	46.12
M 95	Xylenes (total)	106				392541	75.9732	75.97
135	1,4-Dioxane	88	6.172	6.168	(1.282)	18205	313.212	313.21
141	Cyclohexane	56	4.782	4.781	(0.993)	108650	23.8461	23.84
138	Freon TF	101	2.337	2.333	(0.485)	63709	30.6448	30.64
140	1,3-Butadiene	54	1.404	1.400	(0.292)	71957	22.2926	22.29
147	Methylcyclohexane	55	5.951	5.947	(1.072)	182494	22.9799	22.97
146	Methyl Acetate	43	2.716	2.708	(0.564)	54386	18.6969	18.69
148	Tert-Butyl alcohol	59	2.975	2.963	(0.618)	145284	424.497	424.49
149	Isopropyl Alcohol	45	2.570	2.558	(0.534)	79098	353.070	353.06
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15720	22.8801	22.88
12	Isobutyl Alcohol	43	5.291	5.287	(1.099)	237317	413.327	413.32
13	Acetonitrile	39	2.675	2.667	(0.556)	83538	223.083	223.08
14	Allyl Chloride	41	2.675	2.667	(0.556)	170417	19.9243	19.92
25	Methacrylonitrile	41	4.500	4.493	(0.935)	46283	20.3297	20.32
40	Methyl Methacrylate	41	6.161	6.157	(1.279)	70740	20.1959	20.19
4	Propionitrile	54	4.343	4.335	(0.902)	96739	201.010	201.00(a)
136	n-Hexane	57	3.342	3.338	(0.694)	69289	23.5460	23.54
131	Methyl Acrylate	55	4.373	4.365	(0.908)	77880	20.0817	20.08
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	45404	15.2829	15.28
49	Ethyl Methacrylate	69	7.293	7.293	(1.313)	112839	22.5709	22.57
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	262647	24.2043	24.20
167	Ethanol	45	2.086	2.079	(0.433)	16594	382.634	382.63
164	Dicyclopentadiene	66	10.202	10.198	(1.003)	232559	18.0463	18.04
145	alpha-Methylstyrene	118	9.756	9.756	(0.959)	86418	18.8110	18.81
142	Tetrahydrofuran	42	4.549	4.541	(0.945)	29840	43.9894	43.98
156	Diisopropyl ether	45	3.623	3.619	(0.752)	199834	20.8628	20.86
151	4-Methyl-2-pentanol	45	7.222	7.222	(1.300)	400424	564.804	564.80
150	Allyl alcohol	57	3.342	3.338	(0.694)	69289	629.586	629.58
86	Benzyl Chloride	91	10.311	10.311	(1.260)	58098	18.9345	18.93
162	Butyl acrylate	55	8.736	8.732	(1.067)	137380	22.6595	22.65
139	Diethyl ether	59	2.146	2.142	(0.446)	50799	22.1319	22.13
203	2-Ethylhexyl Acrylate	55	12.043	12.043	(1.184)	59235	20.0255	20.02
134	Cyclohexanone	55	9.156	9.152	(0.900)	53264	283.381	283.38(a)
130	Ethyl Acetate	43	4.347	4.339	(0.903)	73608	20.0807	20.08
189	n-Butyl acetate	43	7.709	7.705	(0.942)	125865	22.4412	22.44
132	n-Butanol	56	5.835	5.827	(1.212)	35942	332.494	332.49(a)
133	Ethyl Acrylate	55	5.951	5.947	(1.236)	182494	21.8426	21.84
163	Butyl methacrylate	41	9.651	9.651	(0.949)	88489	23.1201	23.12

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.



Data File: \\nahstus005\target\chem\voa9.i\u230808.b\u080814.d
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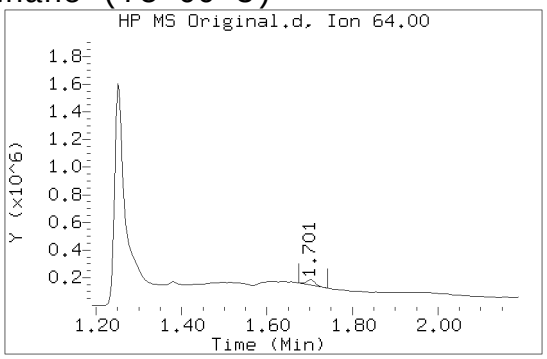
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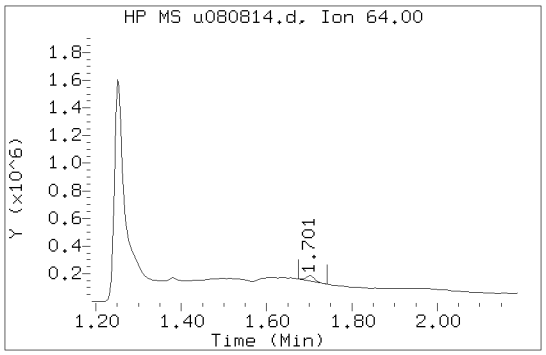
Chloroethane (75-00-3)

Reason Code:

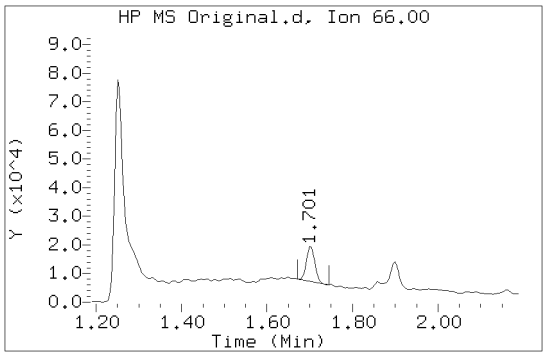
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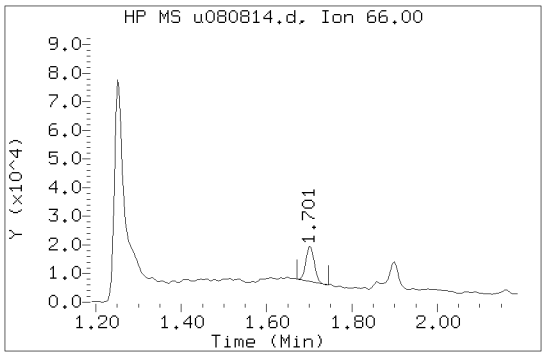
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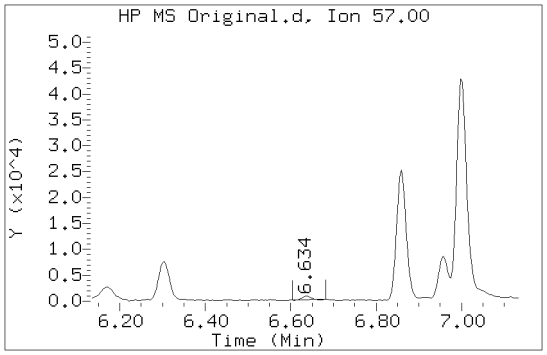
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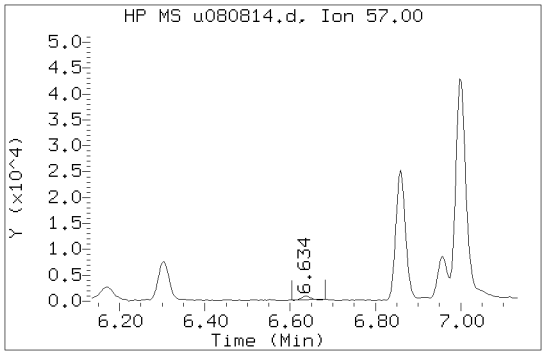
Epichlorohydrin (106-89-8)

Reason Code:

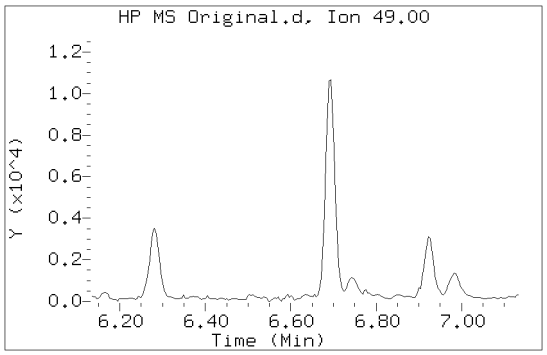
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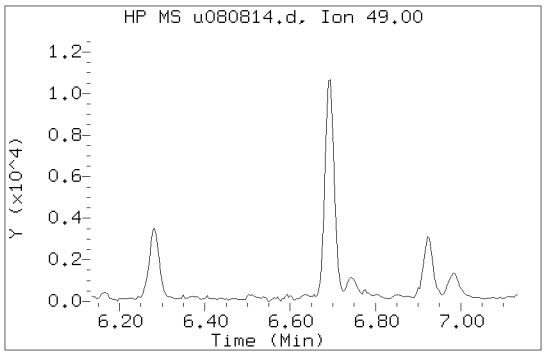
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AFTER
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08-Aug-2023
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Data File: \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080815.D Page 1
Report Date: 08-Aug-2023 22:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080815.D
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Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.812	4.812	(1.000)	463959	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.157	(0.241)	79706	18.7533	18.75
3	Chloromethane	50	1.295	1.288	(0.269)	92569	16.7715	16.77
5	Vinyl Chloride	62	1.374	1.366	(0.286)	87374	19.1273	19.12
6	Bromomethane	94	1.614	1.610	(0.335)	27793	10.0141	10.01
7	Chloroethane	64	1.696	1.689	(0.353)	63274	21.9962	21.99(M)
8	Trichlorofluoromethane	101	1.891	1.888	(0.393)	119716	21.2340	21.23
9	Acrolein	56	1.745	1.741	(0.363)	11859	39.8491	39.84
10	Acetone	43	2.405	2.401	(0.500)	52838	31.1905	31.19
11	1,1-Dichloroethene	96	2.330	2.322	(0.484)	62753	20.5292	20.52
15	Iodomethane	142	2.465	2.461	(0.512)	194718	68.5305	68.53
16	Acrylonitrile	53	3.065	3.057	(0.637)	53888	36.9509	36.95
17	Methylene Chloride	84	2.791	2.787	(0.580)	66992	17.9168	17.91
18	Methyl tert-butyl ether	73	3.080	3.072	(0.640)	193531	20.4839	20.48
19	Carbon Disulfide	76	2.517	2.514	(0.523)	387125	43.5030	43.50
20	trans-1,2-Dichloroethene	96	3.057	3.050	(0.635)	65888	19.2348	19.23
21	Vinyl Acetate	43	3.604	3.601	(0.749)	375309	38.2840	38.28
22	1,1-Dichloroethane	63	3.511	3.507	(0.730)	115357	18.4243	18.42
24	2-Butanone	43	4.268	4.260	(0.887)	61799	33.9051	33.90
26	2,2-Dichloropropane	77	4.182	4.174	(0.869)	90633	20.9946	20.99

27	cis-1,2-Dichloroethene	96	4.193	4.189 (0.871)	84589	22.1225	22.12
28	Chloroform	83	4.572	4.568 (0.950)	134383	18.4434	18.44

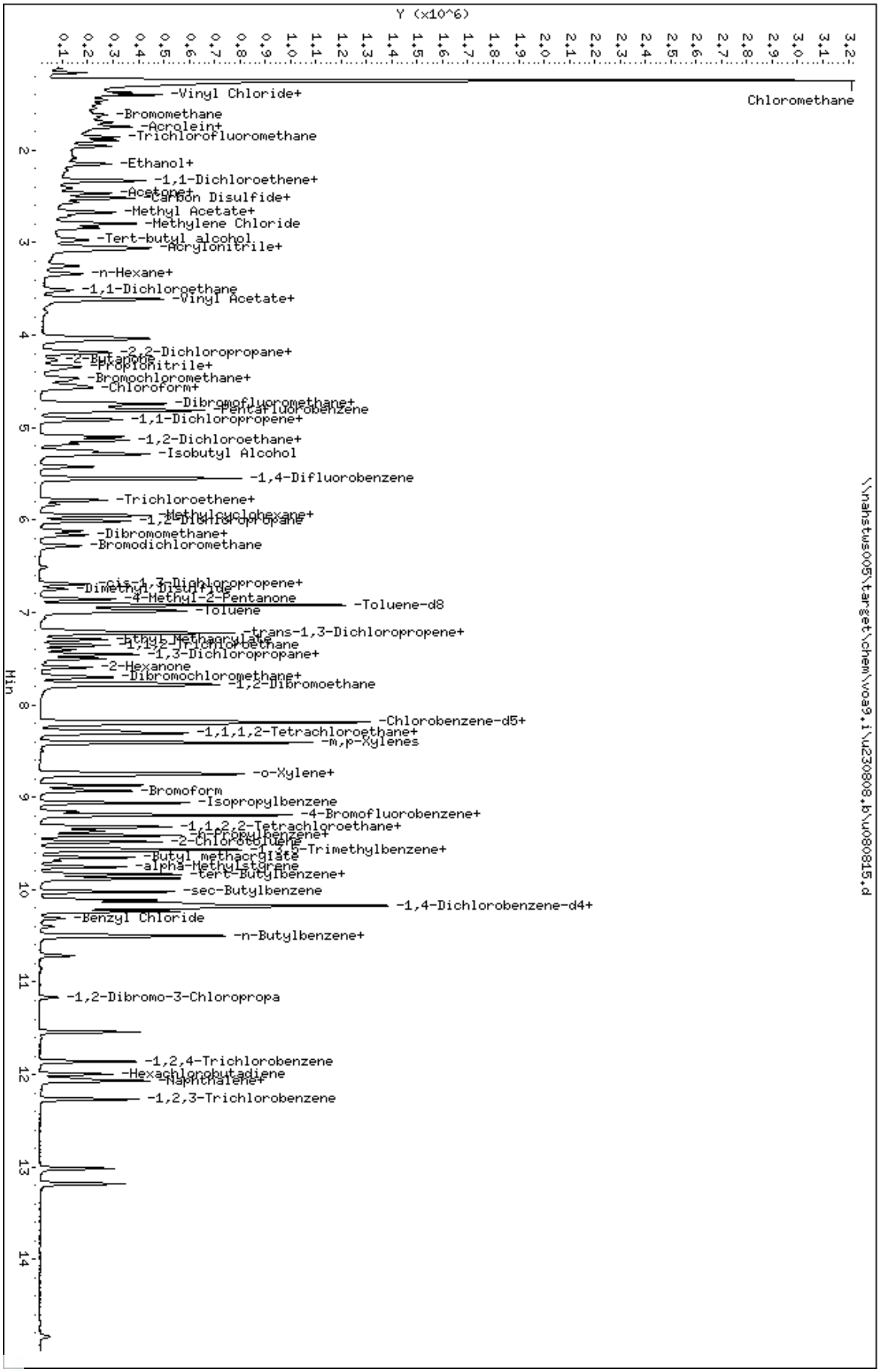
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.467	4.463	(0.928)	40391	17.8518	17.85
$	30 Dibromofluoromethane	113	4.748	4.744	(0.987)	192671	51.9606	51.96
	31 1,1,1-Trichloroethane	97	4.740	4.737	(0.985)	115695	20.4096	20.40
	32 1,1-Dichloropropene	75	4.917	4.916	(0.886)	97581	21.0955	21.09
	33 1,2-Dichloroethane	62	5.175	5.171	(0.932)	111924	20.8638	20.86
	34 Carbon Tetrachloride	117	4.909	4.905	(0.885)	96898	23.3832	23.38
$	35 1,2-Dichloroethane-d4	65	5.096	5.093	(1.059)	220460	54.6739	54.67
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	622950	50.0000	
	37 Benzene	78	5.138	5.134	(0.926)	296951	19.5142	19.51
	38 Trichloroethene	130	5.786	5.786	(1.043)	88085	20.4805	20.48
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	94591	19.4355	19.43
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	76383	18.7287	18.72
	44 Dibromomethane	93	6.120	6.116	(1.103)	52373	19.9931	19.99
	45 4-Methyl-2-Pentanone	43	6.858	6.855	(0.838)	174804	39.8680	39.86
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	100345	17.6628	17.66
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	589270	50.0000	
$	48 Toluene-d8	98	6.922	6.918	(0.846)	725660	52.9448	52.94
	50 Toluene	91	6.978	6.978	(0.853)	330383	20.6218	20.62
	51 trans-1,3-Dichloropropene	75	7.199	7.196	(1.297)	86021	18.3372	18.33
	52 2-Hexanone	43	7.593	7.593	(0.928)	119616	41.1989	41.19
	53 1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	64003	18.6523	18.65
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	131695	18.7099	18.70
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	78403	18.6185	18.61
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	88816	22.8019	22.80
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	81822	19.8218	19.82
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	74168	22.8001	22.80
	59 Chlorobenzene	112	8.208	8.208	(1.003)	226860	19.9749	19.97
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	79237	19.1423	19.14
	61 Ethylbenzene	106	8.305	8.305	(1.015)	111149	21.6179	21.61
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	290639	48.1508	48.15
	63 o-Xylene	106	8.748	8.748	(1.069)	138620	23.4750	23.47
	64 Styrene	104	8.759	8.759	(1.070)	212956	23.1112	23.11
	66 Bromoform	173	8.920	8.920	(1.090)	54949	18.6779	18.67
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	346609	24.2575	24.25
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	110414	16.7762	16.77
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	279054	52.2260	52.22
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	341696	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	102486	17.8847	17.88
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	383481	20.9301	20.93
	74 Bromobenzene	156	9.317	9.317	(0.916)	107544	19.0247	19.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	278952	23.3597	23.35
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	240202	19.9395	19.93
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	288319	21.4270	21.42
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	256492	22.6721	22.67
	79 1,2,4-Trimethylbenzene	105	9.880	9.876	(0.971)	292615	24.1977	24.19
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	325927	26.8117	26.81
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	289105	28.7752	28.77
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	189273	20.0612	20.06
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	200647	19.1911	19.19
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	240020	22.2368	22.23
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	187189	19.3374	19.33
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	16416	17.2998	17.29

90 1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	123412	20.7245	20.72
91 Hexachlorobutadiene	225	11.998	11.998 (1.179)	57245	27.9015	27.90

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	92 Naphthalene	128	12.069	12.065	(1.186)	324006	21.5370	21.53
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	127036	20.8960	20.89
M	94 1,2-Dichloroethylene (total)	96				150477	41.3573	41.35
M	95 Xylenes (total)	106				429259	71.6258	71.62
	135 1,4-Dioxane	88	6.172	6.169	(1.283)	21881	328.929	328.92
	141 Cyclohexane	56	4.778	4.778	(0.993)	111846	21.4484	21.44
	138 Freon TF	101	2.330	2.326	(0.484)	62710	26.5093	26.50
	140 1,3-Butadiene	54	1.400	1.393	(0.291)	72092	19.5147	19.51
	147 Methylcyclohexane	55	5.947	5.944	(1.072)	196978	21.7089	21.70
	146 Methyl Acetate	43	2.712	2.705	(0.564)	54880	16.4848	16.48
	148 Tert-Butyl alcohol	59	2.971	2.960	(0.617)	143265	365.318	365.31
	149 Isopropyl Alcohol	45	2.562	2.555	(0.533)	84624	330.047	330.04
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	16696	20.9528	20.95
	12 Isobutyl Alcohol	43	5.288	5.284	(1.099)	247551	376.718	376.71
	13 Acetonitrile	39	2.667	2.664	(0.554)	85340	199.124	199.12
	14 Allyl Chloride	41	2.671	2.664	(0.555)	174867	17.8635	17.86
	25 Methacrylonitrile	41	4.497	4.489	(0.935)	45074	17.2991	17.29
	40 Methyl Methacrylate	41	6.157	6.154	(1.280)	73693	18.3828	18.38
	4 Propionitrile	54	4.339	4.332	(0.902)	100965	183.305	183.30(a)
	131 Methyl Acrylate	55	4.369	4.362	(0.908)	83208	18.7468	18.74
	182 Epichlorohydrin	57	6.633	6.633	(1.195)	836	24.9899	24.98(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Column phase: DB624

Instrument: VOA9.i
Operator: PC
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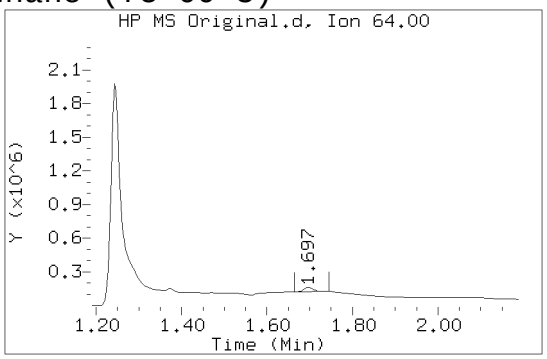
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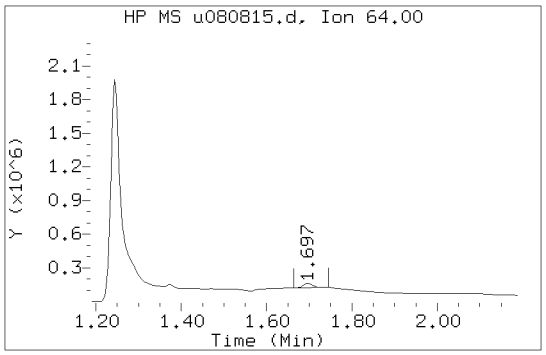
Chloroethane (75-00-3)

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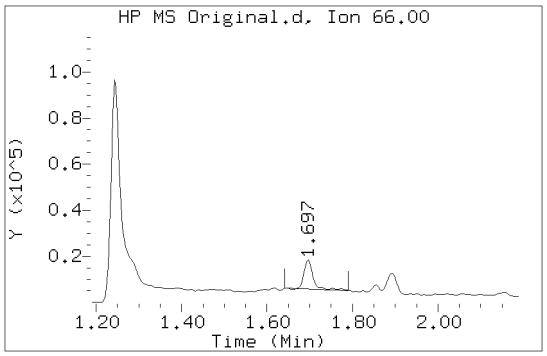
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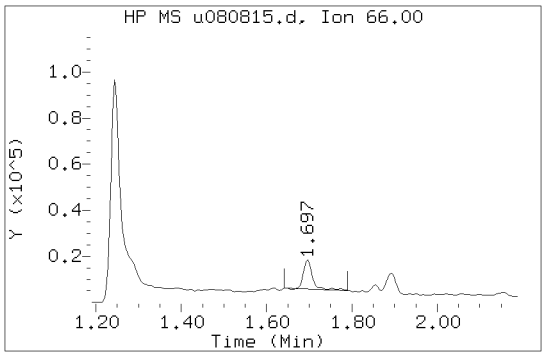
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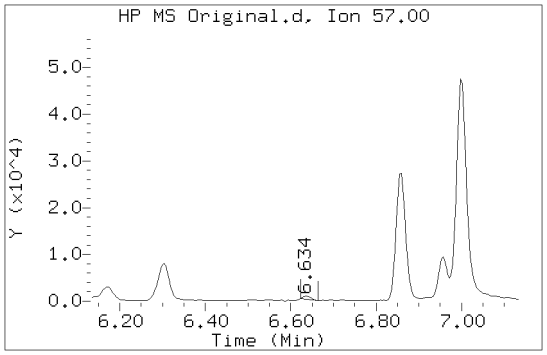
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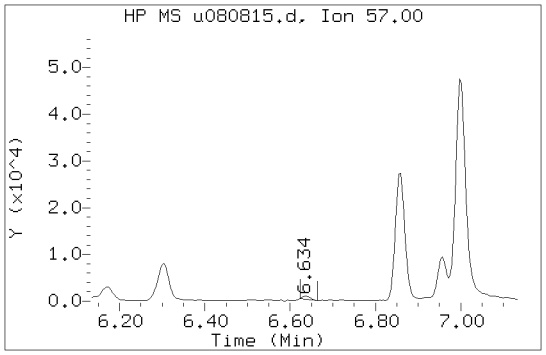
Epichlorohydrin (106-89-8)

Reason Code:

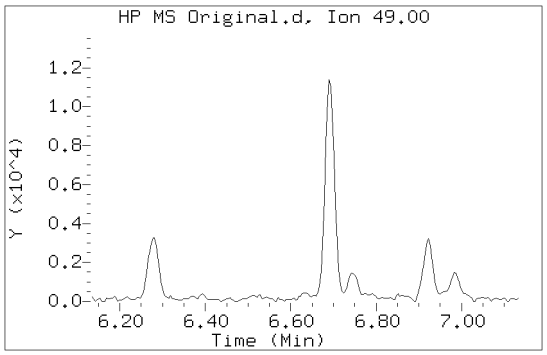
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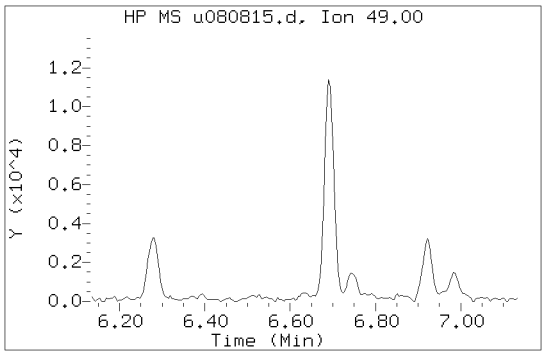
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08-Aug-2023
22:32



Data File: \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080816.D Page 1
Report Date: 08-Aug-2023 22:24

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U230808.b\U080816.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 08-AUG-2023 16:38
Operator : PC Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U230808.b\8260C.m
Meth Date : 08-Aug-2023 22:23 VOA9.i Quant Type: ISTD
Cal Date : 31-JUL-2023 14:06 Cal File: U073108.D
Als bottle: 14 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.812	4.812	(1.000)	417018	50.0000	
2	Dichlorodifluoromethane	85	1.157	1.157	(0.240)	158132	50.0000	39.87
3	Chloromethane	50	1.288	1.288	(0.268)	173991	50.0000	35.45
5	Vinyl Chloride	62	1.367	1.367	(0.284)	165560	50.0000	40.32
6	Bromomethane	94	1.610	1.610	(0.335)	86324	50.0000	38.63
7	Chloroethane	64	1.689	1.689	(0.351)	102684	50.0000	39.71(M)
8	Trichlorofluoromethane	101	1.888	1.888	(0.392)	225146	50.0000	44.42
9	Acrolein	56	1.741	1.741	(0.362)	18991	100.000	70.99
10	Acetone	43	2.401	2.401	(0.499)	125025	100.000	95.45
11	1,1-Dichloroethene	96	2.322	2.322	(0.483)	122076	50.0000	44.43
15	Iodomethane	142	2.461	2.461	(0.512)	302001	100.000	112.38
16	Acrylonitrile	53	3.057	3.057	(0.635)	124834	100.000	95.23
17	Methylene Chloride	84	2.787	2.787	(0.579)	151481	50.0000	45.36
18	Methyl tert-butyl ether	73	3.072	3.072	(0.639)	422238	50.0000	49.72
19	Carbon Disulfide	76	2.510	2.510	(0.522)	717990	100.000	89.76
20	trans-1,2-Dichloroethene	96	3.050	3.050	(0.634)	136007	50.0000	44.17
21	Vinyl Acetate	43	3.601	3.601	(0.748)	847874	100.000	96.22
22	1,1-Dichloroethane	63	3.507	3.507	(0.729)	243701	50.0000	43.30
24	2-Butanone	43	4.261	4.261	(0.885)	141897	100.000	86.61
26	2,2-Dichloropropane	77	4.174	4.174	(0.868)	182471	50.0000	47.02

27	cis-1,2-Dichloroethene	96	4.189	4.189 (0.871)	162678	50.0000	47.33
28	Chloroform	83	4.568	4.568 (0.949)	294276	50.0000	44.93

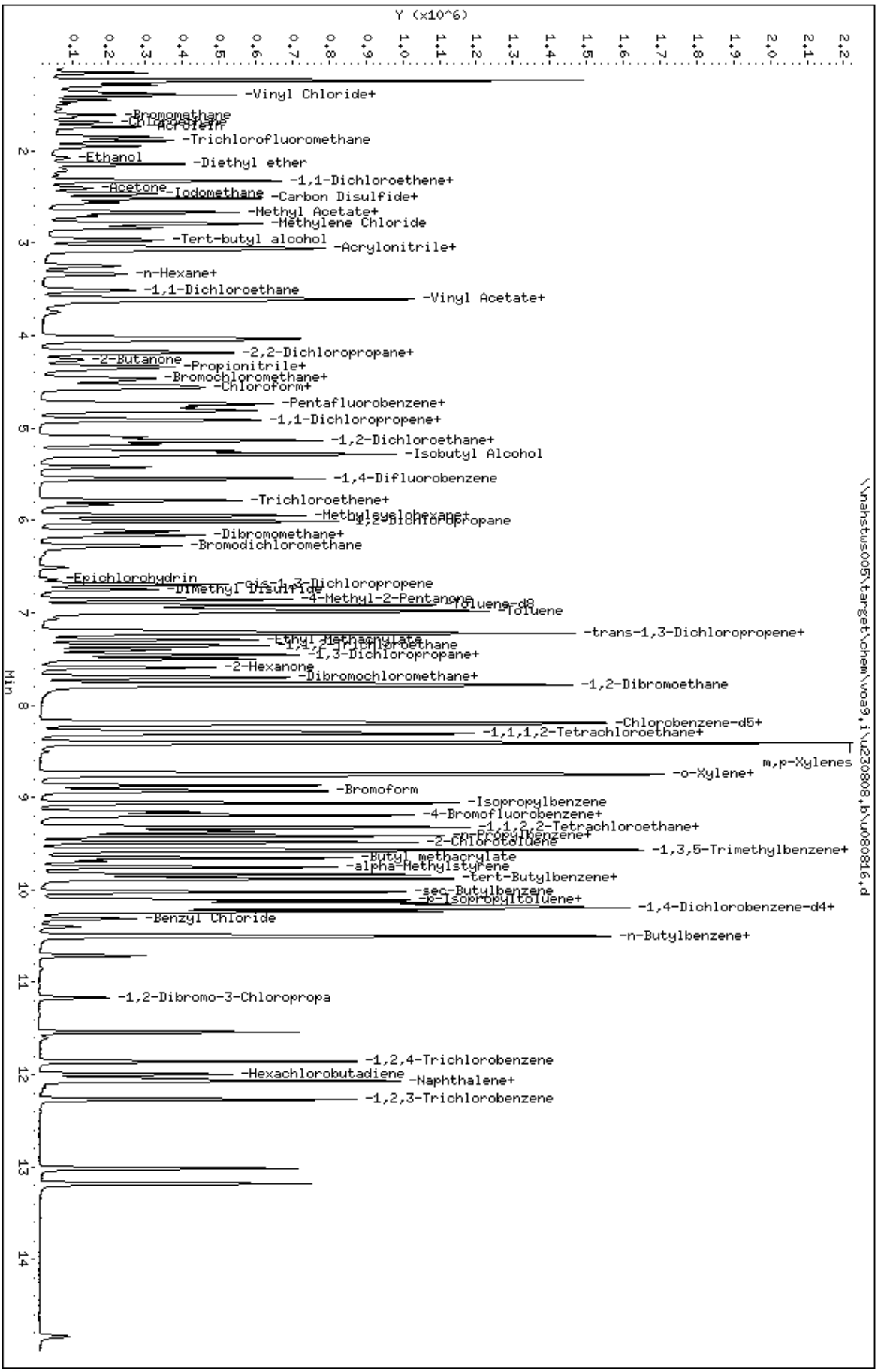
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.463	4.463	(0.928)	90059	50.0000	44.28
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	174891	50.0000	52.48
	31 1,1,1-Trichloroethane	97	4.737	4.737	(0.984)	229278	50.0000	44.99
	32 1,1-Dichloropropene	75	4.917	4.917	(0.886)	191335	50.0000	43.72
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	246166	50.0000	48.50
	34 Carbon Tetrachloride	117	4.905	4.905	(0.884)	166434	50.0000	42.45
$	35 1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	195217	50.0000	53.84
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	589312	50.0000	
	37 Benzene	78	5.134	5.134	(0.925)	637823	50.0000	44.30
	38 Trichloroethene	130	5.786	5.786	(1.043)	181496	50.0000	44.60
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	216181	50.0000	46.95
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	173730	50.0000	45.02
	44 Dibromomethane	93	6.116	6.116	(1.102)	115987	50.0000	46.80
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	398111	100.000	93.94
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	254060	50.0000	43.58
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	569541	50.0000	
$	48 Toluene-d8	98	6.918	6.918	(0.845)	651268	50.0000	49.16
	50 Toluene	91	6.978	6.978	(0.853)	689043	50.0000	44.49
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	216600	50.0000	48.80
	52 2-Hexanone	43	7.593	7.593	(0.928)	268236	100.000	95.58
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	143553	50.0000	43.28
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	303103	50.0000	44.55
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	190748	50.0000	46.86
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	157234	50.0000	41.76
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	187281	50.0000	46.94
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	128192	50.0000	41.65
	59 Chlorobenzene	112	8.208	8.208	(1.003)	492306	50.0000	44.84
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	179682	50.0000	44.91
	61 Ethylbenzene	106	8.305	8.305	(1.015)	229885	50.0000	46.26
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	595510	100.000	102.07
	63 o-Xylene	106	8.748	8.748	(1.069)	295498	50.0000	51.77
	64 Styrene	104	8.759	8.759	(1.070)	489442	50.0000	54.95
	66 Bromoform	173	8.920	8.920	(1.090)	135935	50.0000	47.80
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	684522	50.0000	49.56
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	254304	50.0000	40.09
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	279188	50.0000	54.10
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	329276	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	243038	50.0000	44.01
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	773621	50.0000	42.02
	74 Bromobenzene	156	9.317	9.317	(0.916)	237652	50.0000	43.62
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	564592	50.0000	49.06
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	521228	50.0000	44.89
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	600948	50.0000	46.34
	78 tert-Butylbenzene	119	9.839	9.839	(0.967)	500035	50.0000	45.86
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	596034	50.0000	51.14
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	627537	50.0000	50.20
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	573518	50.0000	54.81
	83 1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	403387	50.0000	44.36
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	426668	50.0000	42.34
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	468007	50.0000	42.54
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	413283	50.0000	44.30
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	40251	50.0000	44.01

90 1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	279198	50.0000	48.65
91 Hexachlorobutadiene	225	11.998	11.998 (1.179)	103612	50.0000	49.66

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.186)	706509	50.0000	46.72
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	279429	50.0000	47.69
M	94 1,2-Dichloroethylene (total)	96				298685	100.000	91.50
M	95 Xylenes (total)	106				891008	150.000	153.85
	135 1,4-Dioxane	88	6.169	6.169	(1.282)	51535	1000.00	861.91
	141 Cyclohexane	56	4.778	4.778	(0.993)	183311	50.0000	39.10
	138 Freon TF	101	2.326	2.326	(0.484)	105642	50.0000	47.49
	140 1,3-Butadiene	54	1.393	1.393	(0.290)	137926	50.0000	41.53
	147 Methylcyclohexane	55	5.944	5.944	(1.071)	376057	50.0000	43.81
	146 Methyl Acetate	43	2.705	2.705	(0.562)	136693	50.0000	45.68
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.616)	357884	1000.00	1020.85
	149 Isopropyl Alcohol	45	2.559	2.559	(0.532)	216681	1000.00	940.21
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	44290	50.0000	57.50
	12 Isobutyl Alcohol	43	5.288	5.288	(1.099)	565436	1000.00	957.32
	13 Acetonitrile	39	2.664	2.664	(0.554)	179701	500.000	466.49
	14 Allyl Chloride	41	2.664	2.664	(0.554)	389173	50.0000	44.23
	25 Methacrylonitrile	41	4.489	4.489	(0.933)	105355	50.0000	44.98
	40 Methyl Methacrylate	41	6.157	6.157	(1.280)	170020	50.0000	47.18
	4 Propionitrile	54	4.335	4.335	(0.901)	236258	500.000	477.21
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	192287	50.0000	48.19
	182 Epichlorohydrin	57	6.633	6.633	(1.195)	10974	200.000	291.30

QC Flag Legend

M - Compound response manually integrated.



Data File: \\nahstws005\target\chem\voa9.i\u230808.b\u080816.d
Date : 08-AUG-2023 16:38
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

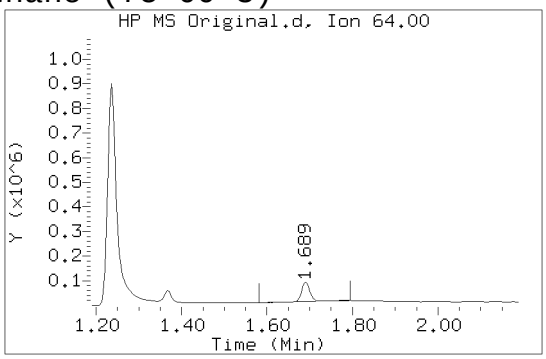
Data File : \\nahstws005\target\chem\voa9.i\u230808.b\u080816.d
Inj Date : 08-AUG-2023 16:38
InstruID : VOA9.i
LabSampID : CCV-END

Chloroethane (75-00-3)

Reason Code:

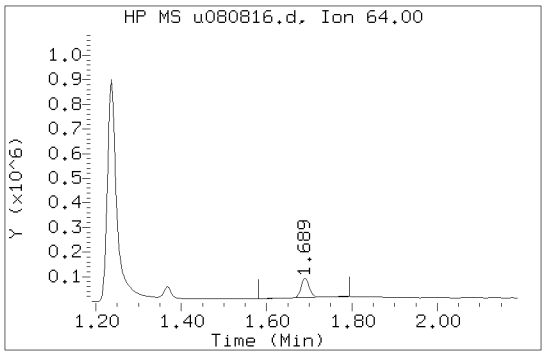
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MASS
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AREA
102684
HEIGHT
78013
08-Aug-2023
22:24



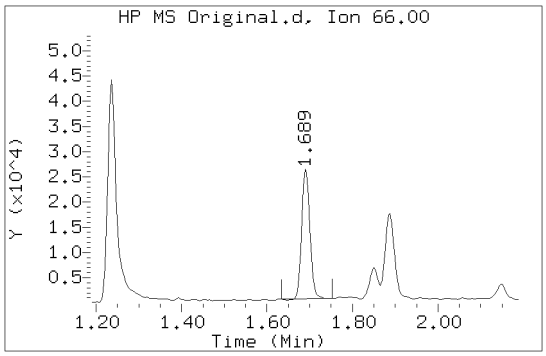
AFTER

MASS
64
AREA
102684
HEIGHT
78013
08-Aug-2023
22:24



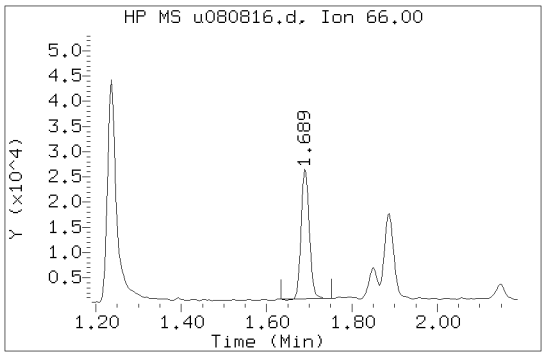
BEFORE

MASS
66
AREA
34936
HEIGHT
25738
08-Aug-2023
22:24



AFTER

MASS
66
AREA
34936
HEIGHT
25738
08-Aug-2023
22:24



HS23080101-MSSEMI-SW8270SIM

ALS WO# HS23080101

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Form 1

Organic Analysis Data Sheet

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Monthly Effluent Samples	**HS23080101**	

Semi-Volatiles by EPA 8270SIM

HS23080101-01	Collected	Received	Matrix	Basis
LH18/24-SP650_080123	08/01/23 13:00	08/02/23 09:30	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile	PrepBatch
1,4-Dioxane	ug/L	0.90	a	0.10	0.10	0.10	10	08/10/23 12:48	SV-6_443683	11.D	198572

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

Semi-Volatiles by EPA 8270SIM

MBLK-198572

MBLK-198572

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile	PrepBatch
1,4-Dioxane	ug/L	0.030	U	0.010	0.030	0.030	1	08/10/23 11:00	SV-6_443683	05.D	198572

01248572

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Form 2

System Monitoring Compound Recovery

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.

Project: Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder: HS23080101

RunID: SV-6-443683

Semi-Volatiles by EPA 8270SIM

HS23080101-01	Analyzed	Conc Units	Dilution
LH18/24-SP650_080123	08/10/23	%REC	10

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
2-Fluorobiphenyl	0.1	0.08	128		40-140
4-Terphenyl-d14	0.077	0.08	96.2		40-140
Nitrobenzene-d5	0.08	0.08	99.9		40-140

LCS-198572	Analyzed	Conc Units	Dilution
LCS-198572	08/10/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
2-Fluorobiphenyl	0.09882	0.08	124		40-140
4-Terphenyl-d14	0.08832	0.08	110		40-140
Nitrobenzene-d5	0.07961	0.08	99.5		40-140

LCSD-198572	Analyzed	Conc Units	Dilution
LCSD-198572	08/10/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
2-Fluorobiphenyl	0.09929	0.08	124		40-140
4-Terphenyl-d14	0.09114	0.08	114		40-140
Nitrobenzene-d5	0.081	0.08	101		40-140

MBLK-198572	Analyzed	Conc Units	Dilution
MBLK-198572	08/10/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
2-Fluorobiphenyl	0.08941	0.08	112		40-140
4-Terphenyl-d14	0.09409	0.08	118		40-140
Nitrobenzene-d5	0.07725	0.08	96.6		40-140

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Form 3B

Laboratory Control Sample Recovery

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

SAMPLENUM LCS-198572

Semi-Volatiles by EPA 8270SIM

SV-6_443683				LCS-198572			LCSD-198572					
Spike Matrix	Aqueous		Run Date	08/10/23			08/10/23					
Result Units	ug/L		Run Time	12:12			12:30					
Prep Method	Prep Batch	Prep Date	Data File	09.D			10.D					
SW3510	08/04/23	198572	Prep Amt	1000 mL			1000 mL					
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
1,4-Dioxane	40-140	0.08	0.05589	70		0.05403	68.0		20	3.37	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

SAMPLENUM LCSD-198572

Semi-Volatiles by EPA 8270SIM

SV-6_443683				LCSD-198572		
Spike Matrix	Aqueous		Run Date	08/10/23		
Result Units	ug/L		Run Time	12:30		
Prep Method	Prep Batch	Prep Date	Data File	10.D		
SW3510	08/04/23	198572	Prep Amt	1000 mL		

Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q
1,4-Dioxane	40-140	0.08	0.05403	68	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 4

Method Blank Summary

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 4 - Method Blank Summary

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Monthly Effluent Samples	**HS23080101**	

Semi-Volatiles by EPA 8270SIM

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-198572	05.D	08/10/23 11:00	SV-6_443683
LCS-198572	LCS	LCS-198572	09.D	08/10/23 12:12	SV-6_443683
LCSD-198572	LCSD	LCSD-198572	10.D	08/10/23 12:30	SV-6_443683
LH18/24-SP650_080123	SAMP	HS23080101-01	11.D	08/10/23 12:48	SV-6_443683

01248579

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Form 5

Instrument Performance Check

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID SV-6-439923

Semi-Volatiles by EPA 8270SIM

Tune File 01.D 06/16/23 6/16/2023

m / e	Ion Abundance Criterion	%RA
51	30.0 - 80.0% of mass 198	40.3 (40.3)
68	Less than 2.0% of mass 69	0.5 (1.44) 1
69	Mass 69 RA	32.2 (32.2)
70	Less than 2.0% of mass 69	0.2 (0.502) 1
127	25.0 - 75.0% of mass 198	38.5 (38.5)
197	Less than 1.0% of mass 198	0.5 (0.46)
198	Base peak, 100% RA	100 (83.3)
199	5.0 - 9.0% of mass 198	6.5 (6.46)
275	10.0 - 30.0% of mass 198	25.8 (25.8)
365	Greater than 0.75% of mass 198	3.4 (3.43)
441	Present, but less than mass 443	17.7 (76.4)
442	40.0 - 110.0% of mass 198	120.1 (120)
443	15.0 - 24.0% of mass 442	23.2 (19.3) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	14DXICAL-	ICAL1	6/16/2023	04	14DXICAL-0.01
2	14DXICAL-	ICAL2	6/16/2023	05	14DXICAL-0.03
3	14DXICAL-	ICAL3	6/16/2023	06	14DXICAL-0.05
4	14DXICAL-	ICAL4	6/16/2023	07	14DXICAL-0.08
5	14DXICAL-	ICAL6	6/16/2023	09	14DXICAL-0.15
6	14DXICAL-0.1	ICAL5	6/16/2023	12	14DXICAL-0.1
7	14DXICAL-0.5	ICAL8	6/16/2023	14	14DXICAL-0.5
8	14DXICAL-0.2	ICAL7	6/16/2023	15	14DXICAL-0.2
9	14DXICV-0.08	ICV	6/16/2023	16	14DXICV-0.08

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID SV-6-443683

Semi-Volatiles by EPA 8270SIM

Tune File 01.D 08/10/23 8/10/2023

m / e	Ion Abundance Criterion	%RA
51	30.0 - 80.0% of mass 198	71.1 (71.13)
68	Less than 2.0% of mass 69	0.7 (1.49) 1
69	Mass 69 RA	47.1 (47.11)
70	Less than 2.0% of mass 69	0.2 (0.51) 1
127	25.0 - 75.0% of mass 198	53.7 (53.74)
197	Less than 1.0% of mass 198	0.7 (0.66)
198	Base peak, 100% RA	100 (100)
199	5.0 - 9.0% of mass 198	7.2 (7.25)
275	10.0 - 30.0% of mass 198	23.6 (23.61)
365	Greater than 0.75% of mass 198	3.5 (3.47)
441	Present, but less than mass 443	12.2 (76.77)
442	40.0 - 110.0% of mass 198	80.7 (80.72)
443	15.0 - 24.0% of mass 442	15.9 (19.67) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	1 4DX-0.08	CCV	8/10/2023	04	1 4DX-0.08
2	MBLK-198572	MBLK	8/10/2023	05	MBLK-198572
3	HS23080101-	SAMP	8/10/2023	08	LH18/24-SP650_080123
4	LCS-198572	LCS	8/10/2023	09	LCS-198572
5	LCSD-198572	LCSD	8/10/2023	10	LCSD-198572
6	HS23080101-	SAMP	8/10/2023	11	LH18/24-SP650_080123
7	1 4DX-CCV	CCV	8/10/2023	12	1 4DX-CCV END

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Form 6

Initial Calibration Data

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Initial Calibration Data

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID SV-6_439923

Semi-Volatiles by EPA 8270SIM

ICAL Start Date 10-MAR-2022 1025
ICAL End Date 16-JUN-2023 1556

Calibration Files

Calibration file names

Level 1..target\chem\sv6.i\230616.b\04.d
Level 2..target\chem\sv6.i\230616.b\05.d
Level 3..target\chem\sv6.i\230616.b\06.d
Level 4..target\chem\sv6.i\230616.b\07.d
Level 5..target\chem\sv6.i\230616.b\12.d
Level 6..target\chem\sv6.i\230616.b\09.d
Level 7..target\chem\sv6.i\230616.b\15.d
Level 8..target\chem\sv6.i\230616.b\14.d

Compound	0.20000 Level 7 0.01000 Level 1	0.50000 Level 8 0.03000 Level 2	0.05000 Level 3	0.08000 Level 4	0.10000 Level 5	0.15000 Level 6	RRF	%RSD	Q
1,4-Dioxane	0.30124 0.40150	0.32659 0.31193	0.32643	0.34940	0.35892	0.33837	0.33930	9.241	
2-Fluorophenol	0.40150 NE NE	0.31193 NE NE	NE	NE	NE	NE	0.33930 NE	9.241 NE	
13 Phenol-d6	NE NE	NE NE	NE	NE	NE	NE	NE	NE	
33 Nitrobenzene-d5	0.28832 0.34832	0.28035 0.27609	0.30204	0.32108	0.30808	0.30634	0.30383	7.735	
69 2-Fluorobiphenyl	0.98985 1.25227	0.97067 0.94386	0.97876	1.06873	0.97017	1.00640	1.02259	9.764	
105 2,4,6-Tribromophenol	NE NE	NE NE	NE	NE	NE	NE	NE	NE	
158 4-Terphenyl-d14	0.60104 1.00267	0.68127 0.75942	0.64541	0.74244	0.75380	0.71602	0.73776	16.347	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

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Form 6I

Initial Calibration Verification (ICV)

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
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Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID SV-6_439923

Semi-Volatiles by EPA 8270SIM

Sample Matrix LIQUID
Lab Smp Id 14DXICV-0.08
Level LOW

Fraction SV
Client Smp ID 14DXICV-0.08
Operator LG

Compound	CONC Added	CONC Recovered	% Recovered	Limits	Q
1,4-Dioxane	0.08000	0.07070	88.38	40-140	
Nitrobenzene-d5	0.08000	0.07086	88.57	40-140	
2-Fluorobiphenyl	0.08000	0.08036	100.45	40-140	
4-Terphenyl-d14	0.08000	0.08379	104.74	40-140	

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Form 7

Continuing Calibration Verification (CCV)

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID SV-6_443683

Semi-Volatiles by EPA 8270SIM

Instrument ID SV6.I
Lab File ID 04.D
Analysis Type WATER
Lab Sample ID 1 4DX-0.08 Quant Type

Injection Date :28
ICAL Date(s) 10-MAR-2022 16-JUN-2023
ICAL Times :25 15:56
ISTD

Compound	$\overline{RRF}$ / Conc	RF0.080	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
33 Nitrobenzene-d5	0.30383	0.27515	0.010	-9.43815	20.0	Averaged	
69 2-Fluorobiphenyl	1.02259	0.98540	0.010	-3.63637	20.0	Averaged	
158 4-Terphenyl-d14	0.73776	0.70790	0.010	-4.04764	20.0	Averaged	
1,4-Dioxane	0.33930	0.30281	0.010	-10.75424	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder HS23080101

RunID SV-6_443683

Semi-Volatiles by EPA 8270SIM

Instrument ID SV6.I
Lab File ID 12.D
Analysis Type WATER
Lab Sample ID 1 4DX-0.08 Quant Type

Injection Date :06
ICAL Date(s) 10-MAR-2022 16-JUN-2023
ICAL Times :25 15:56
ISTD

Compound	$\overline{RRF}$ / Conc	RF0.080	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
33 Nitrobenzene-d5	0.30383	0.27291	0.010	-10.17750	50.0	Averaged	
69 2-Fluorobiphenyl	1.02259	0.97721	0.010	-4.43778	50.0	Averaged	
158 4-Terphenyl-d14	0.73776	0.71667	0.010	-2.85880	50.0	Averaged	
1,4-Dioxane	0.33930	0.30303	0.010	-10.68917	50.0	Averaged	

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Form 12

Preparation Log

Semi-VolatilesEPA 3510

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
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Phone (281) 530-5656 Fax (281) 530-5887
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Form 12 - Preparation Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID 198572

Semi-VolatilesEPA 3510

Prep Batch 198572 **Prep Date** 08/04/23

	Matrix	Type	Client Sample ID	Lab Sample ID	Initial Amt (mL)	Final Amt (mL)
1	Aqueous	MBLK	MBLK-198572	MBLK-198572	1000	1
2	Aqueous	LCS	LCS-198572	LCS-198572	1000	1
3	Aqueous	LCSD	LCSD-198572	LCSD-198572	1000	1
4	Water	SAMP	LH18/24-SP650_080123	HS23080101-01	1000	1

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Analysis Run Log

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory
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Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID SV-6-439923

Semi-Volatiles by EPA 8270SIM

Run ID SV-6_439923 **Start Date** 06/16/23 **EndDate** 06/16/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
09:28	DFTPP	TUNE	DFTPP	01.D	06/16/23	1
11:08	14DXICAL-0.01	ICAL1	14DXICAL-0.01	04.D	06/16/23	1
11:26	14DXICAL-0.03	ICAL2	14DXICAL-0.03	05.D	06/16/23	1
11:44	14DXICAL-0.05	ICAL3	14DXICAL-0.05	06.D	06/16/23	1
12:02	14DXICAL-0.08	ICAL4	14DXICAL-0.08	07.D	06/16/23	1
12:38	14DXICAL-0.15	ICAL6	14DXICAL-0.15	09.D	06/16/23	1
14:15	14DXICAL-0.1	ICAL5	14DXICAL-0.1	12.D	06/16/23	1
14:51	14DXICAL-0.5	ICAL8	14DXICAL-0.5	14.D	06/16/23	1
15:56	14DXICAL-0.2	ICAL7	14DXICAL-0.2	15.D	06/16/23	1
16:22	14DXICV-0.08	ICV	14DXICV-0.08	16.D	06/16/23	1

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Monthly Effluent Samples

Workorder **HS23080101**

RunID SV-6-443683

Semi-Volatiles by EPA 8270SIM

Run ID SV-6_443683 **Start Date** 08/10/23 **EndDate** 08/10/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
08:48	DFTPP	TUNE	DFTPP	01.D	08/10/23	1
10:28	1 4DX-0.08	CCV	1 4DX-0.08	04.D	08/10/23	1
11:00	MBLK-198572	MBLK	MBLK-198572	05.D	08/10/23	1
11:54	HS23080101-01	SAMP	LH18/24-	08.D	08/10/23	1
12:12	LCS-198572	LCS	LCS-198572	09.D	08/10/23	1
12:30	LCSD-198572	LCSD	LCSD-198572	10.D	08/10/23	1
12:48	HS23080101-01	SAMP	LH18/24-	11.D	08/10/23	10
13:06	1 4DX-CCV END	CCV	1 4DX-CCV END	12.D	08/10/23	1

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Raw Data SV 6 439923

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

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Data File: \\nahstws005\Target\chem\SV6.i\230616.b\01.D Page 1
Report Date: 16-Jun-2023 09:41

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\SV6.i\230616.b\01.D
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 16-JUN-2023 09:28
Operator : smith Inst ID: SV6.i
Smp Info : DFTPP;DFTPP;3;;DFTPP
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230616.b\DFTPP.m
Meth Date : 14-Mar-2023 15:59 Linh.Pham Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: None
Processing Host: NAHSTW7015

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 dftpp							CAS #: 5074-71-5	
5.009	6.357	-1.348	198	573312			0.00- 100.00	83.28
5.009	6.357	-1.348	51	231176			10.00- 80.00	40.32
5.009	6.357	-1.348	68	2654			0.00- 2.00	1.44
5.009	6.357	-1.348	69	184729			0.00- 0.00	32.22
5.009	6.357	-1.348	70	927			0.00- 2.00	0.50
5.009	6.357	-1.348	127	220864			10.00- 80.00	38.52
5.009	6.357	-1.348	197	2637			0.00- 2.00	0.46
5.009	6.357	-1.348	199	37040			5.00- 9.00	6.46
5.009	6.357	-1.348	275	147776			10.00- 60.00	25.78
5.009	6.357	-1.348	365	19688			1.00- 100.00	3.43
5.009	6.357	-1.348	441	101568			0.01- 99.99	76.45
5.009	6.357	-1.348	442	688448			50.00- 150.00	120.08
5.009	6.357	-1.348	443	132864			15.00- 24.00	19.30

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	40.32
68	Less than 2.00% of mass 69	0.46 (1.44)
69	Mass 69 relative abundance	32.22
70	Less than 2.00% of mass 69	0.16 (0.50)
127	10.00 - 80.00% of mass 198	38.52
197	Less than 2.00% of mass 198	0.46
199	5.00 - 9.00% of mass 198	6.46
275	10.00 - 60.00% of mass 198	25.78
365	1.00 - 100.00% of mass 198	3.43
441	Present, but less than mass 443	17.72
442	50.00 - 150.00% of mass 198	120.08
443	15.00 - 24.00% of mass 442	23.17 (19.30)

Data File: 01.D
Spectrum: HP ChemStation MS 01.D, Scan 453: 5.010 min. (SUB)
Location of Maximum: 442.10
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.10	691	128.10	16159	209.00	1513	297.00	5492
38.00	1909	129.00	84336	210.10	2201	298.00	365
39.10	12523	130.00	6769	211.00	6102	301.00	640
40.00	181	131.00	1444	213.00	401	302.00	602
40.90	276	132.10	794	214.00	192	303.10	4693
45.00	312	133.10	248	215.00	1503	304.00	1179
49.00	1051	134.00	2156	216.00	2932	304.90	175
50.10	53200	135.00	6519	217.00	39448	308.00	557
51.10	231168	136.00	2427	218.00	4584	309.00	385
52.10	12049	137.10	3257	219.00	408	310.00	461
53.00	444	138.10	689	221.10	31488	311.10	249
55.00	841	139.00	436	221.70	5812	311.90	184
56.00	6699	140.00	864	223.00	9377	312.90	383
57.00	16176	141.00	10733	224.10	87680	314.00	1739
58.00	734	142.00	3754	225.10	21984	315.00	3954
61.00	2603	143.00	2343	226.00	2230	316.10	2781
62.00	2746	144.00	787	227.00	33024	317.00	633
63.00	8959	145.00	657	228.00	4457	319.90	232
64.00	1134	146.10	1823	229.00	7608	321.00	1268
65.10	3754	147.00	5380	230.00	950	322.00	605
66.20	170	148.00	12478	231.00	3201	323.10	14516
66.90	176	149.00	2115	232.00	487	324.00	2985
68.00	2654	150.00	633	233.00	674	325.00	302
69.00	184704	151.60	2531	234.00	1838	326.00	247
70.00	927	152.00	808	235.00	2392	327.00	2521
71.10	180	153.00	3358	236.00	1374	328.00	1205
73.00	1217	154.00	2616	237.00	2292	329.00	338
74.00	17520	155.00	6177	238.00	338	332.00	1141
75.00	28192	156.10	9411	239.00	1122	333.00	1368
76.10	9960	157.00	2001	240.00	936	334.10	8776
77.10	218880	158.00	2113	241.00	1871	335.00	2203
78.10	13466	159.00	1675	242.00	4359	336.00	187
79.00	12046	160.10	3244	243.10	4502	339.10	380
80.00	9791	161.00	5606	244.10	67632	339.90	281
81.00	14216	162.00	1730	245.10	8922	341.00	1623
82.00	3653	163.00	400	246.00	11263	342.10	476
83.00	3381	164.00	727	247.00	2407	346.00	2738
84.00	184	165.00	4330	248.10	663	347.00	596
85.00	2227	166.00	3419	249.00	2399	350.90	220
86.00	3237	167.00	24512	250.00	534	352.10	4359
87.00	1991	168.00	9507	251.00	626	353.00	3284
88.00	676	169.10	1791	252.00	592	354.10	4838
89.00	341	170.00	842	253.00	1532	355.00	896
91.00	2912	170.90	1000	254.00	2136	359.00	467
92.00	3110	172.00	2269	255.00	354304	365.00	19688

93.00	21304	173.10	2549	256.00	51136	366.00	2752
94.00	1218	174.00	5175	257.00	3611	370.10	513
95.00	484	175.00	9799	258.00	18768	371.00	1054
96.00	924	176.00	2683	259.00	3038	372.00	8081
97.10	374	177.00	3904	260.00	415	373.10	1766
98.00	16345	178.00	1303	261.00	547	374.00	321
99.00	11441	179.00	17472	263.00	216	377.00	254
100.00	1118	180.00	12918	264.00	482	383.00	2280
101.00	8931	181.00	6121	265.00	7562	384.00	529
101.90	481	182.10	939	266.00	1247	385.00	199
103.00	2466	183.00	711	267.90	202	390.10	1132
104.00	4787	184.00	1198	270.00	419	391.00	640
105.00	4856	185.10	9374	270.90	595	392.00	528
106.00	1473	186.10	74288	272.00	859	401.00	506
107.00	67952	187.10	20504	273.00	9955	402.00	3420
108.00	9807	188.00	2068	274.00	26688	403.00	5432
109.00	1838	189.00	3837	275.00	147776	404.00	1627
110.00	123544	189.90	682	276.10	18968	405.00	236
111.00	17696	191.00	2262	277.00	11809	415.00	201
112.00	1819	192.00	6230	278.00	1774	421.00	5131
112.90	638	193.10	7049	279.00	482	422.00	3941
114.00	179	194.00	1444	280.90	159	423.00	33192
114.80	238	195.00	1036	282.00	357	424.00	5796
116.00	3334	196.10	15513	283.00	1383	425.00	632
117.00	50184	197.00	2637	284.00	975	434.00	155
118.10	3139	198.00	573312	285.00	2248	436.70	155
119.00	504	199.00	37040	286.10	556	441.10	101568
120.00	697	200.00	3218	289.00	393	442.10	688448
121.00	285	201.50	2802	290.00	552	443.10	132864
122.00	4036	203.00	3916	291.00	367	444.10	12072
123.10	5628	204.00	19400	291.90	558	445.00	733
124.00	2843	205.10	32656	293.00	2916		
125.00	2735	206.10	146944	294.00	680		
126.10	975	207.10	18016	295.00	908		
127.00	220864	208.10	4201	296.00	40008		

Data File: \\nahstws005\target\chem\sv6.i\230616.b\01.d

Date : 16-JUN-2023 09:28

Client ID: DFTPP

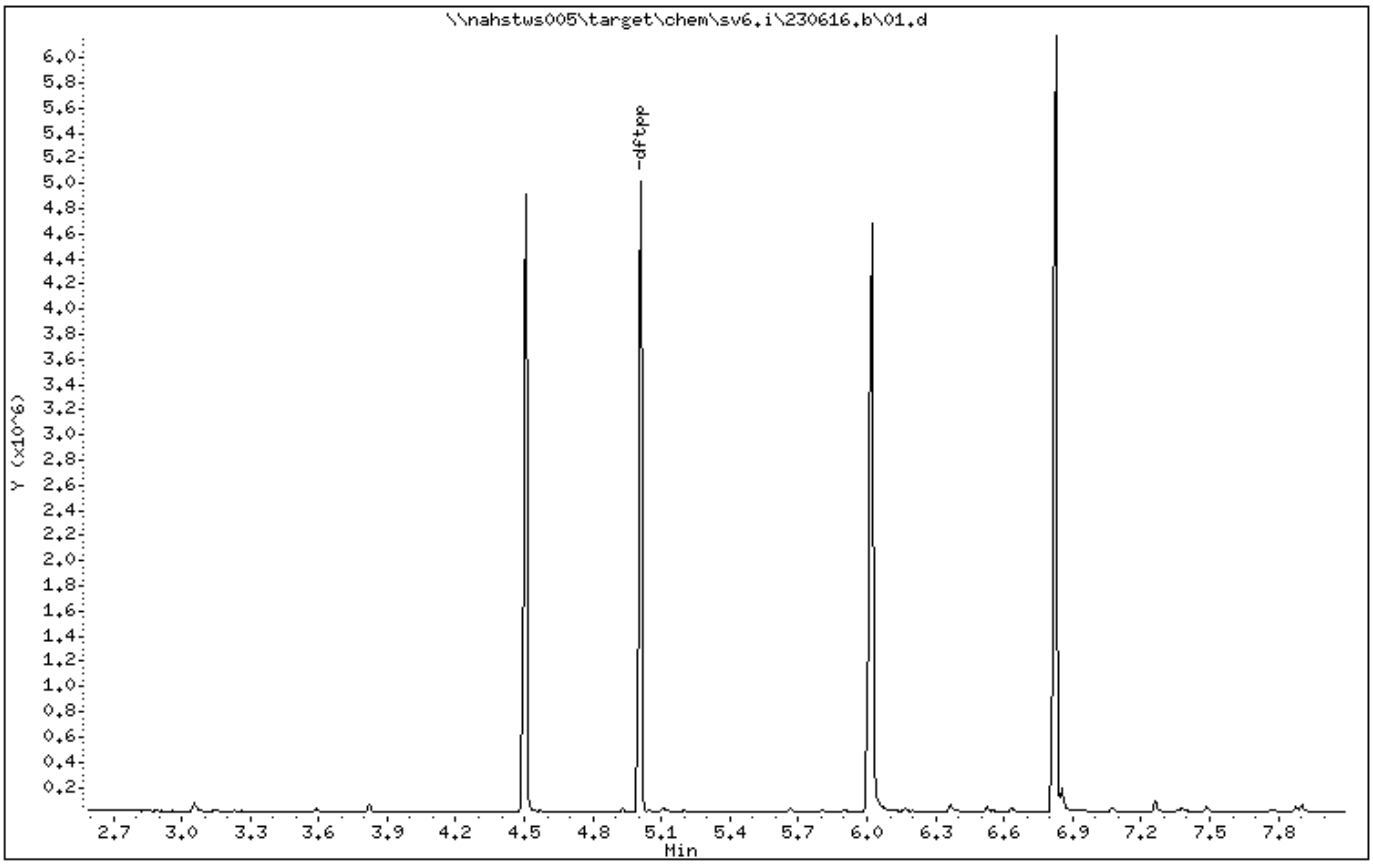
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File : \\nahstws005\target\chem\sv6.i\230616.b\01.d
Inj Date : 16-JUN-2023 09:28
InstruID : SV6.i
LabSampID : DFTPP

NO MANUAL INTEGRATIONS

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\04.D
Lab Smp Id: 14DXICAL-0.01 Client Smp ID: 14DXICAL-0.01
Inj Date : 16-JUN-2023 11:08
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.01
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 12:20 Cal File: 08.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.128	(1.000)	5079	0.10000	(a)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	17862	0.10000	
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	515	0.01000	0.009537(QM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	10143	0.10000	
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	1004	0.01000	0.009665(M)
* 126 Phenanthrene-d10	188	7.322	7.322	(1.000)	20228	0.10000	
* 182 Chrysene-d12	240	10.023	10.023	(1.000)	14841	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.909	8.909	(0.889)	892	0.01000	0.008235(M)
* 198 Perylene-d12	264	11.945	11.945	(1.000)	14498	0.10000	(M)
1 1,4-Dioxane	58	1.486	1.486	(0.475)	153	0.01000	0.008943(aQM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248602

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\04.D

Date : 16-JUN-2023 11:08

Client ID: 14DXICAL-0.01

Instrument: SV6.i

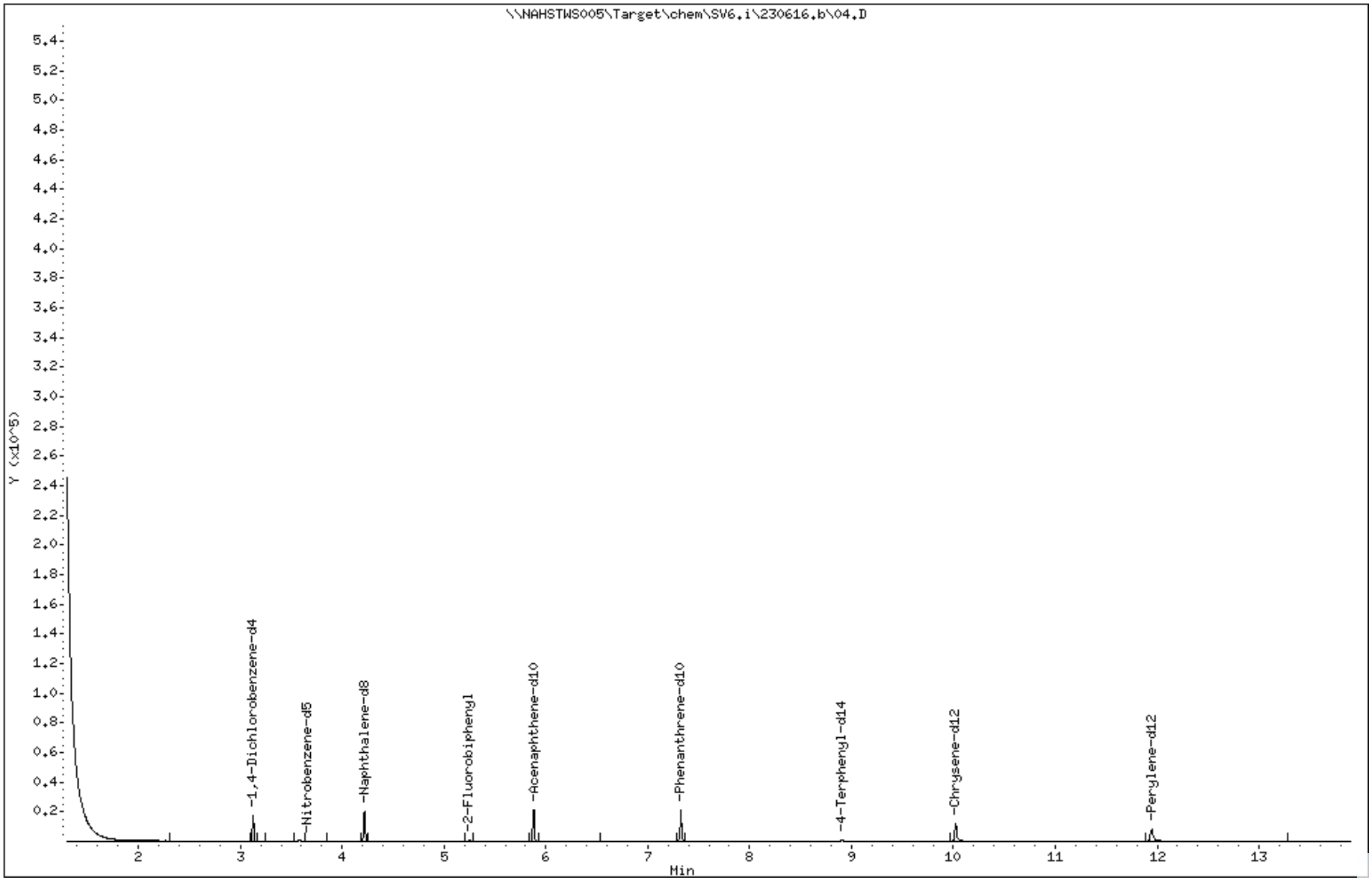
Sample Info: 14DXICAL-0.01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



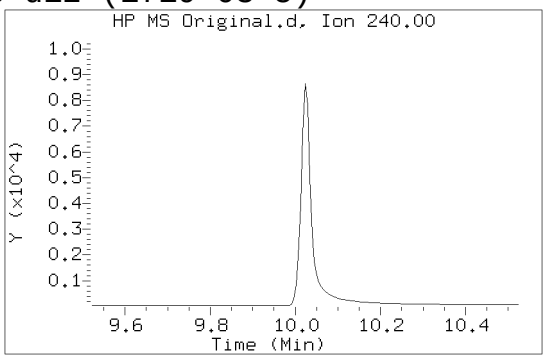
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Inj Date : 16-JUN-2023 11:08
InstruID : SV6.i
LabSampID : 14DXICAL-0.01

Chrysene-d12 (1719-03-5)

Reason Code:

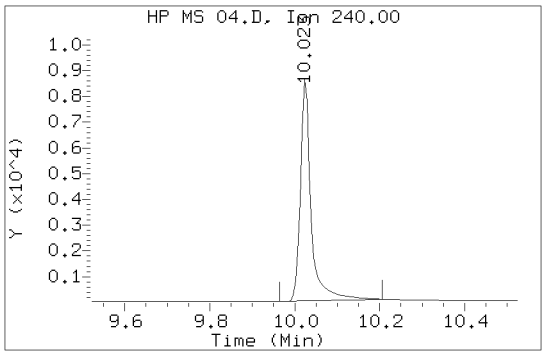
BEFORE

MASS
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AREA
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HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



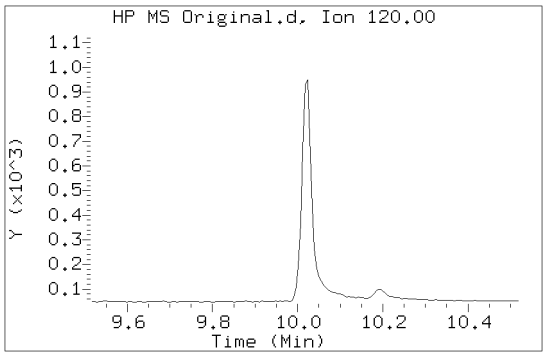
AFTER

MASS
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AREA
14841
HEIGHT
8583
29-Jun-2023
14:26
ALSHS
Ser



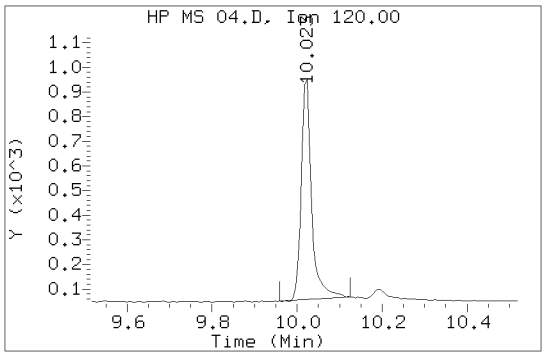
BEFORE

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AREA
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HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



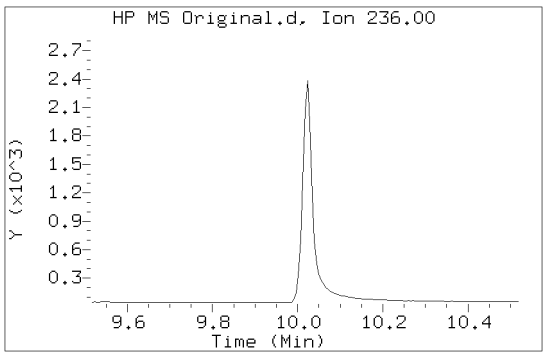
AFTER

MASS
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AREA
1504
HEIGHT
891
29-Jun-2023
14:26
ALSHS
Ser



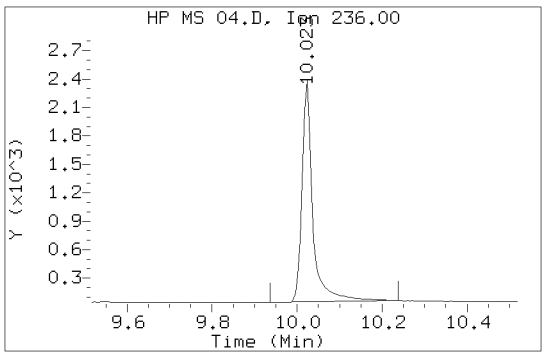
BEFORE

MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
236
AREA
4047
HEIGHT
2330
29-Jun-2023
14:26
ALSHS
Ser

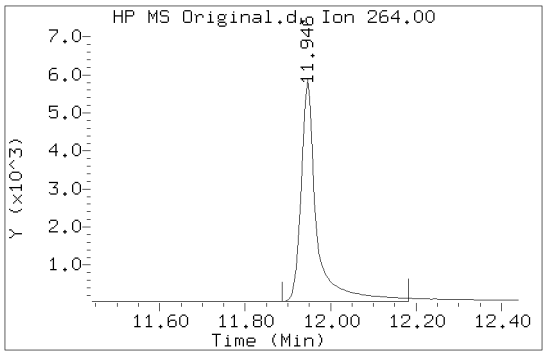


Perylene-d12 (1520-96-3)

Reason Code:

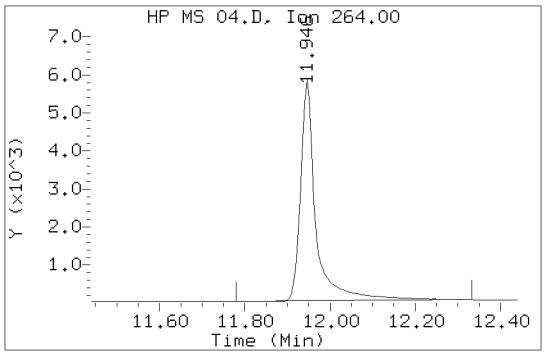
BEFORE

MASS
264
AREA
14674
HEIGHT
5826
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
264
AREA
14498
HEIGHT
5814
29-Jun-2023
14:26
ALSHS
Ser



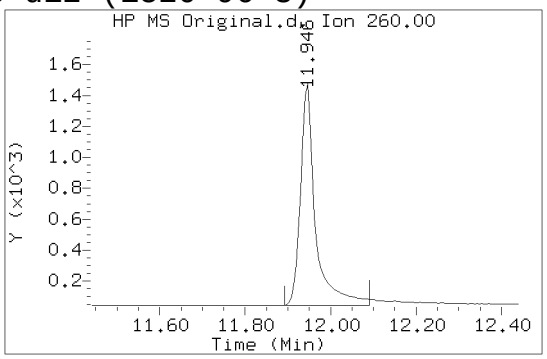
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Inj Date : 16-JUN-2023 11:08
InstruID : SV6.i
LabSampID : 14DXICAL-0.01

Perylene-d12 (1520-96-3)

Reason Code:

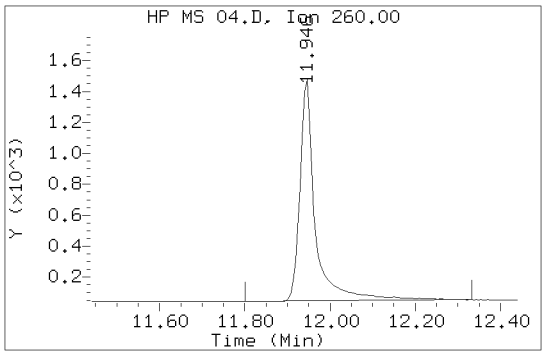
BEFORE

MASS
260
AREA
3461
HEIGHT
1431
16-Jun-2023
11:24
ALSHS
Server



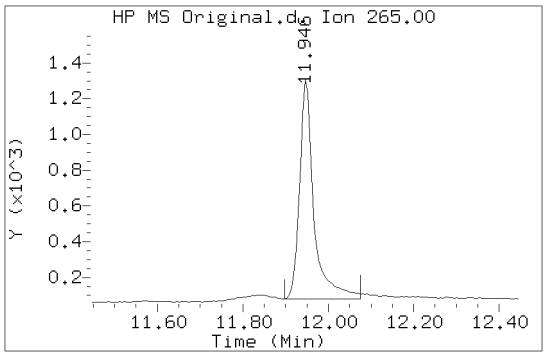
AFTER

MASS
260
AREA
3563
HEIGHT
1428
29-Jun-2023
14:26
ALSHS
Ser



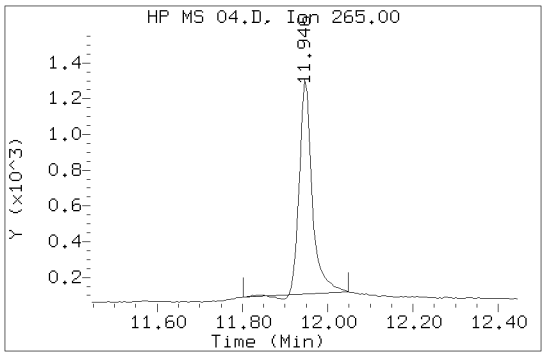
BEFORE

MASS
265
AREA
2841
HEIGHT
1225
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
265
AREA
2485
HEIGHT
1196
29-Jun-2023
14:26
ALSHS
Ser

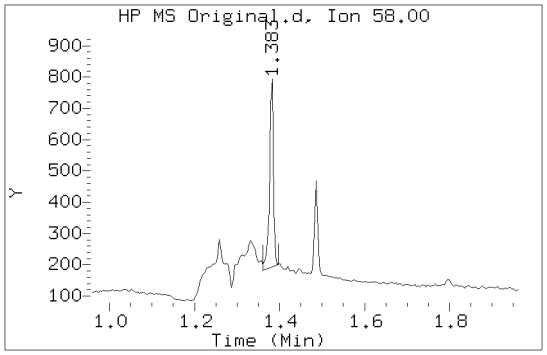


1,4-Dioxane ()

Reason Code:

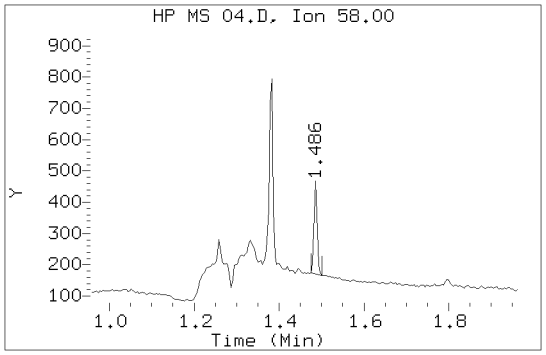
BEFORE

MASS
58
AREA
375
HEIGHT
599
16-Jun-2023
11:24
ALSHS
Server



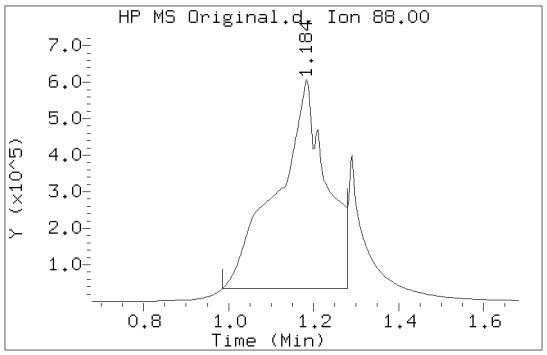
AFTER

MASS
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AREA
153
HEIGHT
296
29-Jun-2023
14:26
ALSHS
Ser



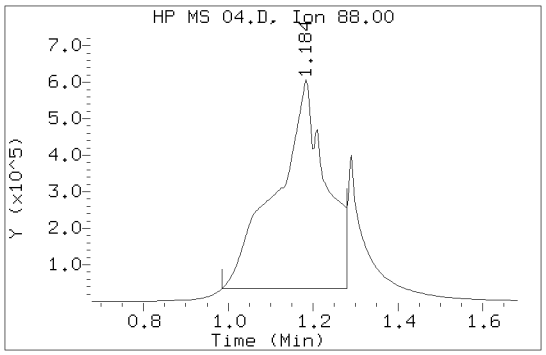
BEFORE

MASS
88
AREA
4618745
HEIGHT
572488
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
88
AREA
4618745
HEIGHT
572488
29-Jun-2023
14:26
ALSHS
Ser



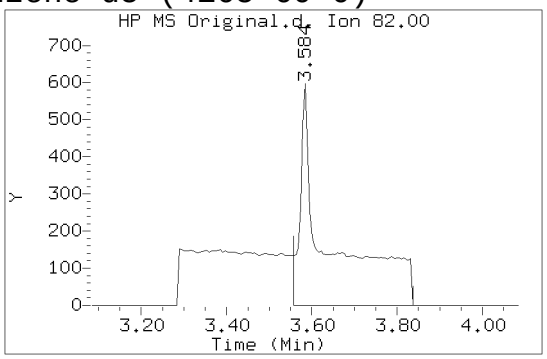
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Inj Date : 16-JUN-2023 11:08
InstruID : SV6.i
LabSampID : 14DXICAL-0.01

Nitrobenzene-d5 (4165-60-0)

Reason Code:

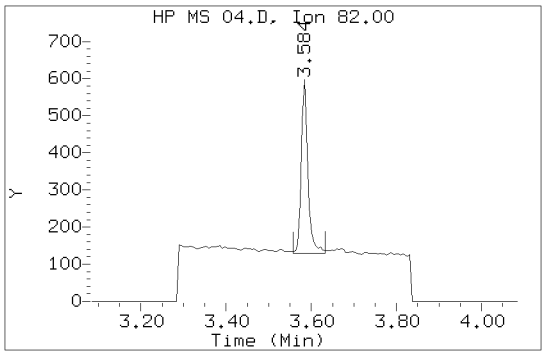
BEFORE

MASS
82
AREA
2695
HEIGHT
597
16-Jun-2023
11:24
ALSHS
Server



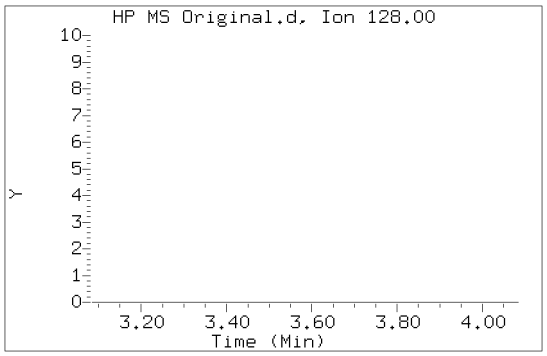
AFTER

MASS
82
AREA
515
HEIGHT
468
29-Jun-2023
14:26
ALSHS
Ser



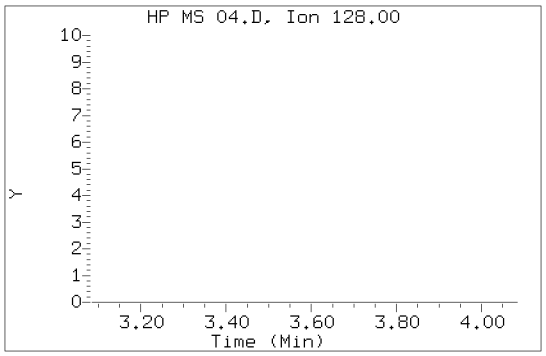
BEFORE

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AREA
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HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



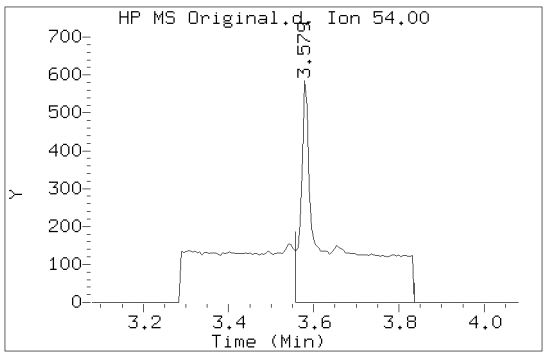
AFTER

MASS
128
AREA
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HEIGHT
0
29-Jun-2023
14:26
ALSHS
Ser



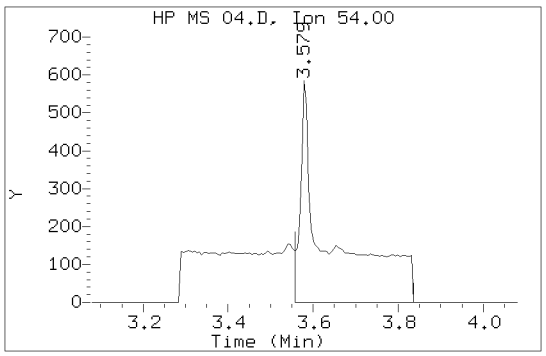
BEFORE

MASS
54
AREA
2634
HEIGHT
585
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
54
AREA
2634
HEIGHT
585
29-Jun-2023
14:26
ALSHS
Ser

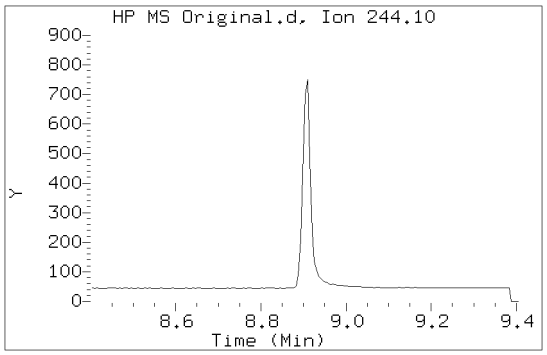


4-Terphenyl-d14 (1718-51-0)

Reason Code:

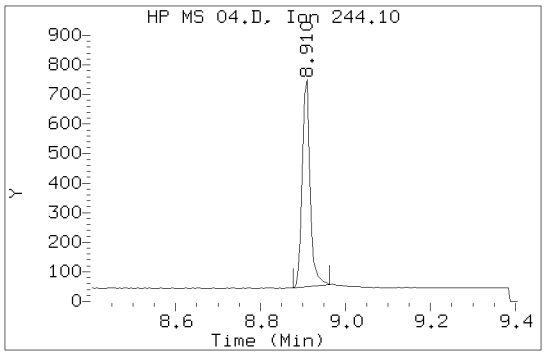
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
244.1
AREA
892
HEIGHT
699
29-Jun-2023
14:26
ALSHS
Ser



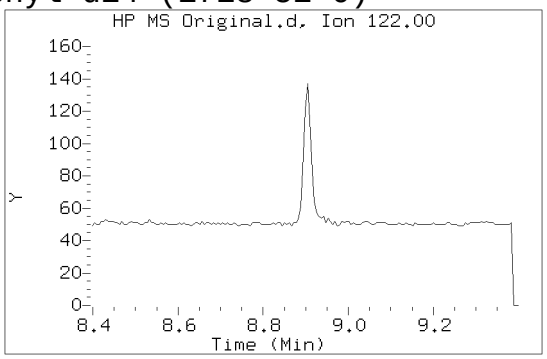
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Inj Date : 16-JUN-2023 11:08
InstruID : SV6.i
LabSampID : 14DXICAL-0.01

4-Terphenyl-d14 (1718-51-0)

Reason Code:

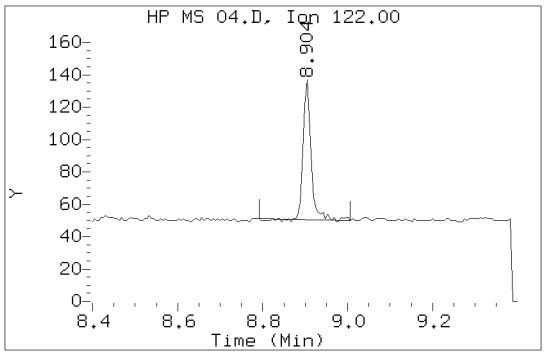
BEFORE

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AREA
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HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



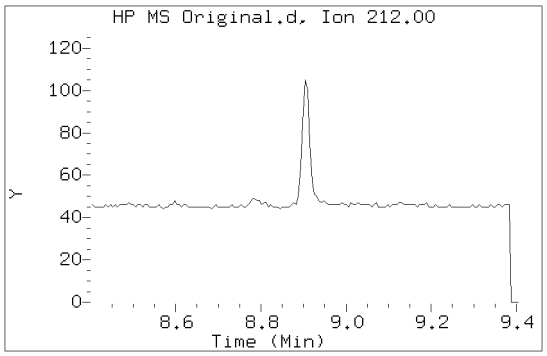
AFTER

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AREA
109
HEIGHT
86
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14:26
ALSHS
Ser



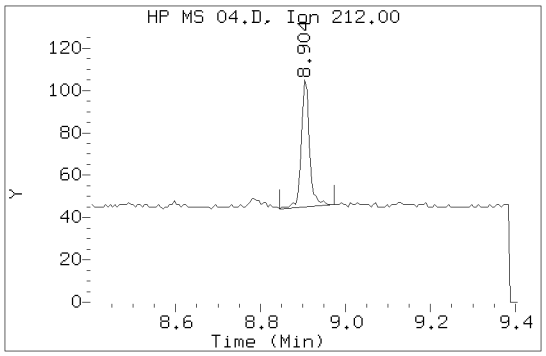
BEFORE

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212
AREA
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HEIGHT
0
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
212
AREA
80
HEIGHT
60
29-Jun-2023
14:26
ALSHS
Ser

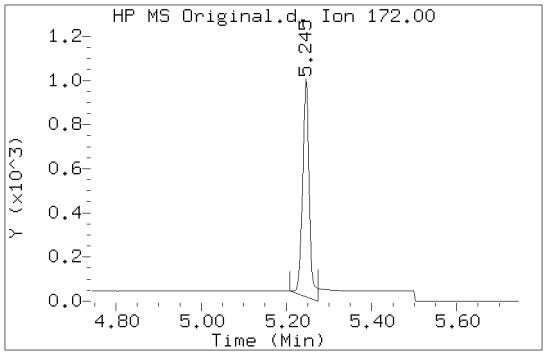


2-Fluorobiphenyl (321-60-8)

Reason Code:

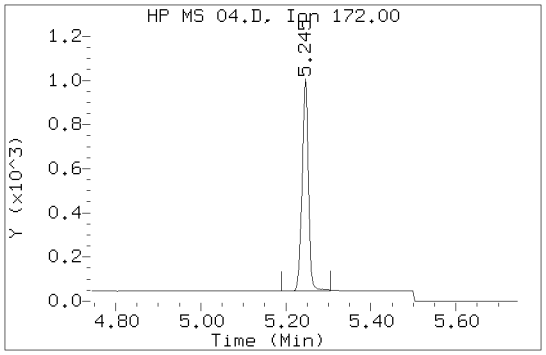
BEFORE

MASS
172
AREA
1093
HEIGHT
986
16-Jun-2023
11:24
ALSHS
Server



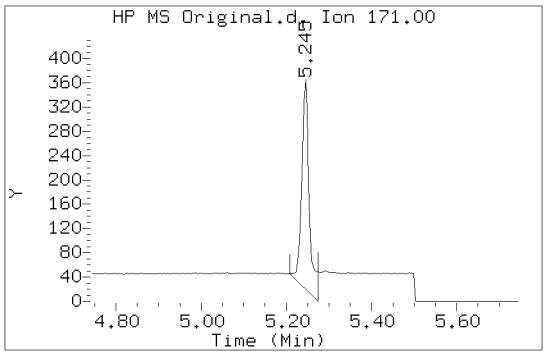
AFTER

MASS
172
AREA
1004
HEIGHT
960
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14:26
ALSHS
Ser



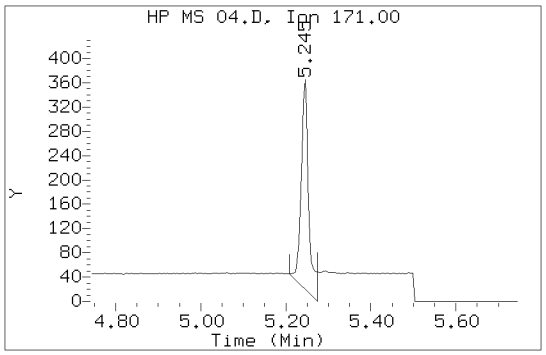
BEFORE

MASS
171
AREA
428
HEIGHT
345
16-Jun-2023
11:24
ALSHS
Server



AFTER

MASS
171
AREA
428
HEIGHT
345
29-Jun-2023
14:26
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\05.D Page 1
Report Date: 29-Jun-2023 14:27

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\05.D
Lab Smp Id: 14DXICAL-0.03 Client Smp ID: 14DXICAL-0.03
Inj Date : 16-JUN-2023 11:26
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.03
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 11:08 Cal File: 04.D
Als bottle: 5 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.128	(1.000)	4348	0.10000	(aM)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	14672	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	1234	0.03000	0.02782(QM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	8616	0.10000	
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	2509	0.03000	0.02843(M)
* 126 Phenanthrene-d10	188	7.322	7.322	(1.000)	16998	0.10000	
* 182 Chrysene-d12	240	10.023	10.023	(1.000)	11821	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.904	8.904	(0.888)	2416	0.03000	0.02800(M)
* 198 Perylene-d12	264	11.940	11.940	(1.000)	10677	0.10000	(M)
1 1,4-Dioxane	58	1.467	1.467	(0.469)	426	0.03000	0.02909(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248608

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\05.D

Page 1

Date : 16-JUN-2023 11:26

Client ID: 14DXICAL-0.03

Instrument: SV6.i

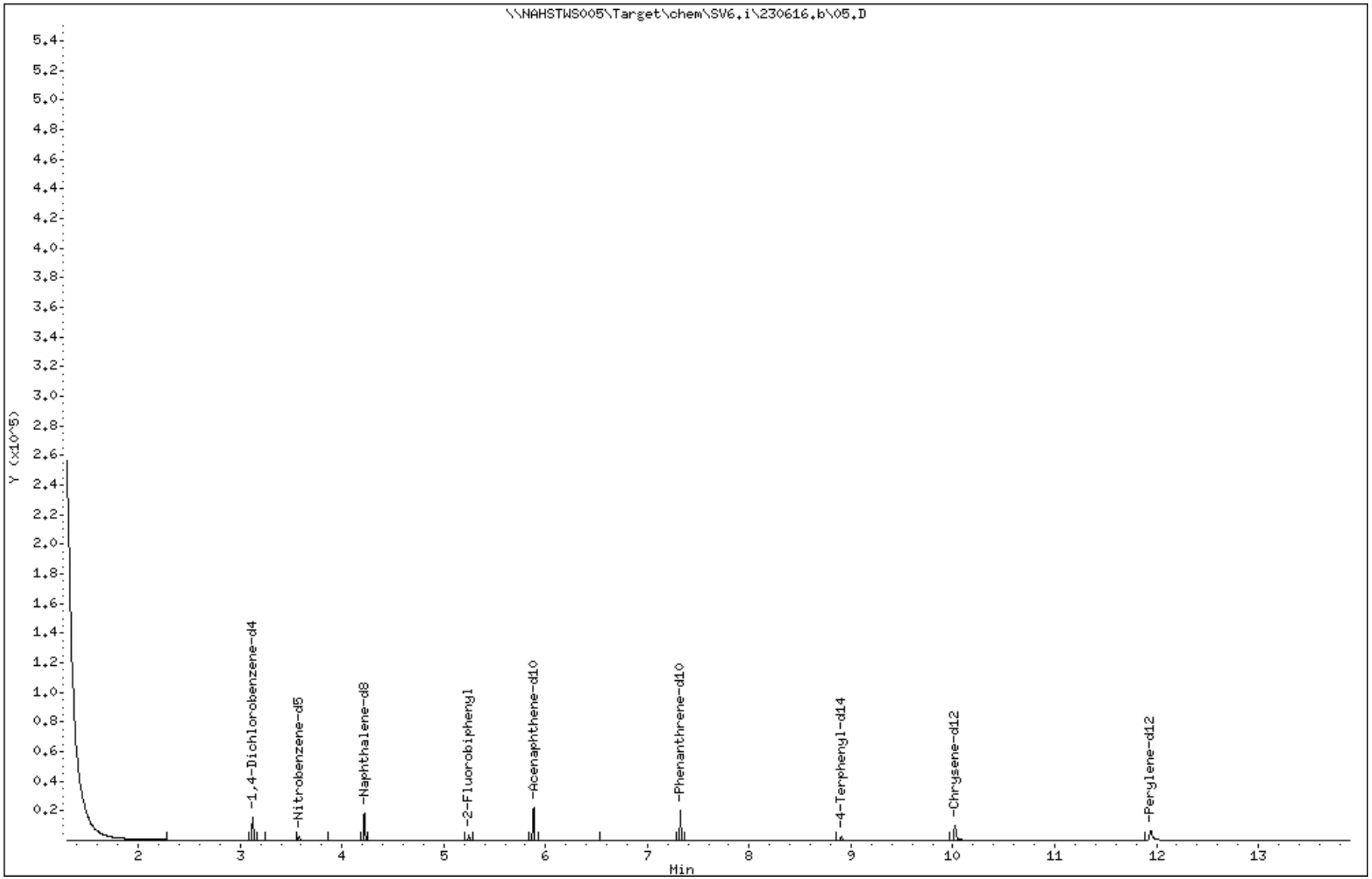
Sample Info: 14DXICAL-0.03

Purge Volume: 1000.0

Operator: LC

Column phase: RTX-5SIL MS

Column diameter: 0.28



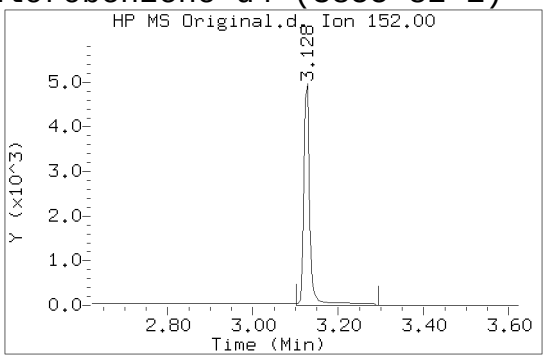
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Inj Date : 16-JUN-2023 11:26
InstruID : SV6.i
LabSampID : 14DXICAL-0.03

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

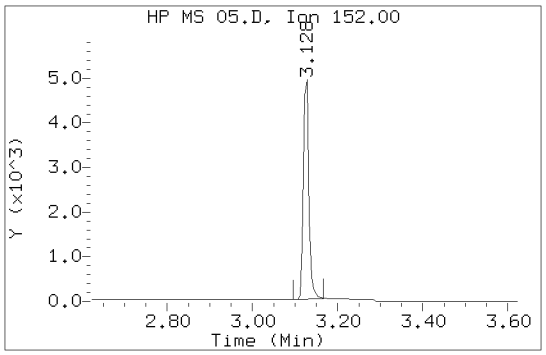
BEFORE

MASS
152
AREA
4935
HEIGHT
4966
16-Jun-2023
11:42
ALSHS
Server



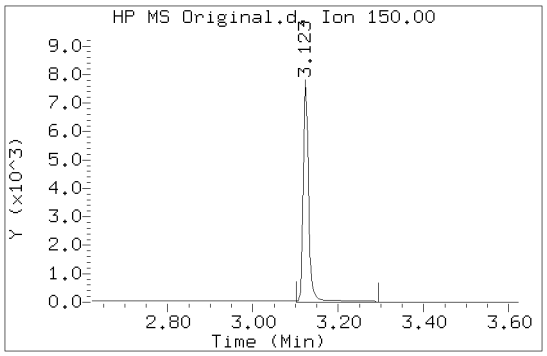
AFTER

MASS
152
AREA
4348
HEIGHT
4916
29-Jun-2023
14:26
ALSHS
Ser



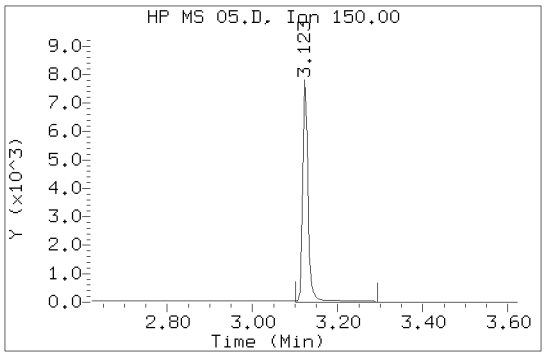
BEFORE

MASS
150
AREA
6954
HEIGHT
7812
16-Jun-2023
11:42
ALSHS
Server



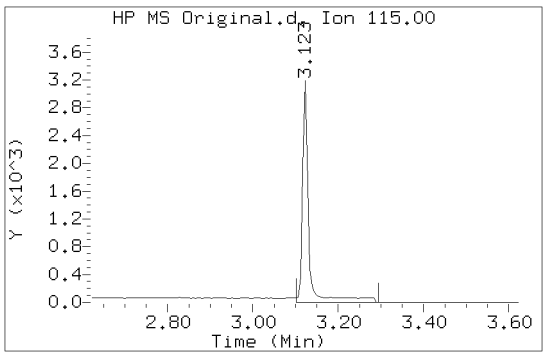
AFTER

MASS
150
AREA
6954
HEIGHT
7812
29-Jun-2023
14:26
ALSHS
Ser



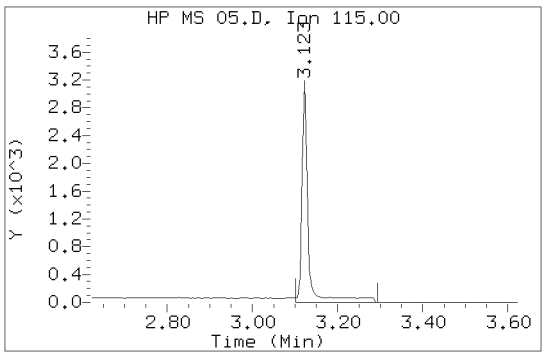
BEFORE

MASS
115
AREA
3189
HEIGHT
3190
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
115
AREA
3189
HEIGHT
3190
29-Jun-2023
14:26
ALSHS
Ser

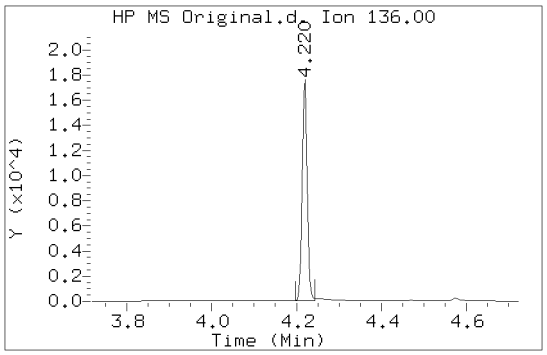


Naphthalene-d8 (1146-65-2)

Reason Code:

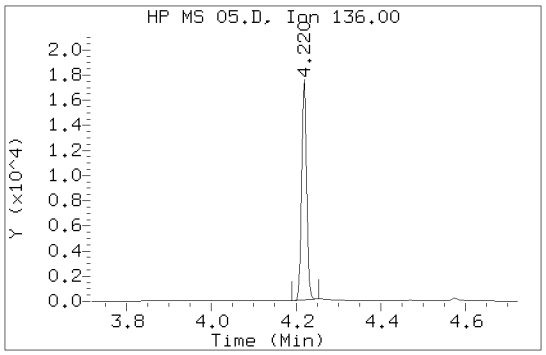
BEFORE

MASS
136
AREA
14851
HEIGHT
17567
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
136
AREA
14672
HEIGHT
17505
29-Jun-2023
14:26
ALSHS
Ser



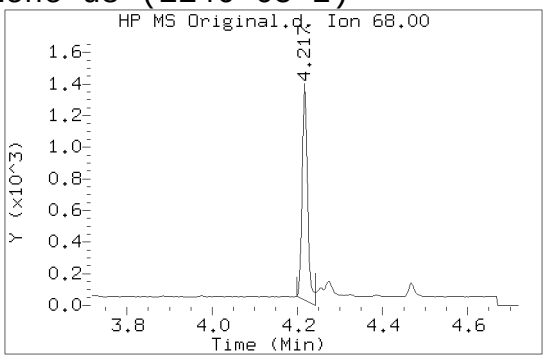
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Inj Date : 16-JUN-2023 11:26
InstruID : SV6.i
LabSampID : 14DXICAL-0.03

Naphthalene-d8 (1146-65-2)

Reason Code:

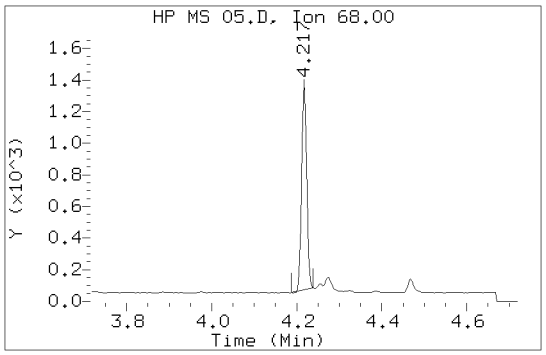
BEFORE

MASS
68
AREA
1196
HEIGHT
1368
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
68
AREA
1062
HEIGHT
1328
29-Jun-2023
14:26
ALSHS
Ser

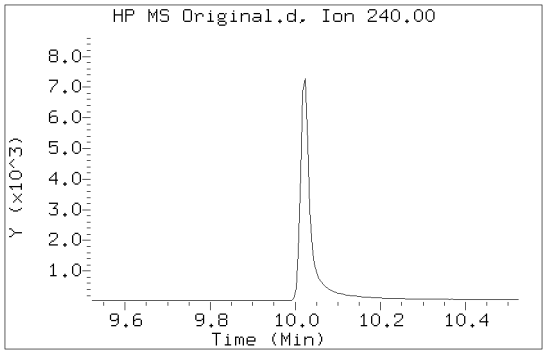


Chrysene-d12 (1719-03-5)

Reason Code:

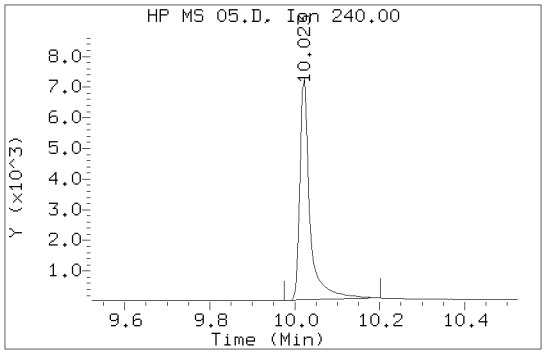
BEFORE

MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



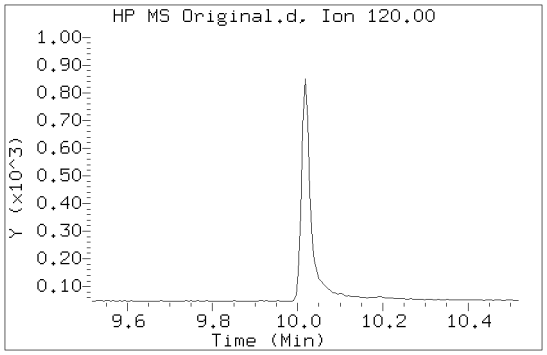
AFTER

MASS
240
AREA
11821
HEIGHT
7215
29-Jun-2023
14:26
ALSHS
Ser



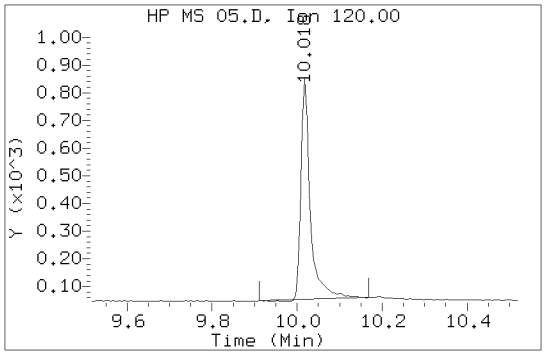
BEFORE

MASS
120
AREA
0
HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



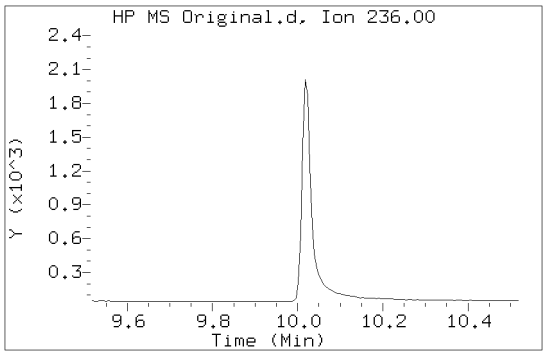
AFTER

MASS
120
AREA
1207
HEIGHT
796
29-Jun-2023
14:26
ALSHS
Ser



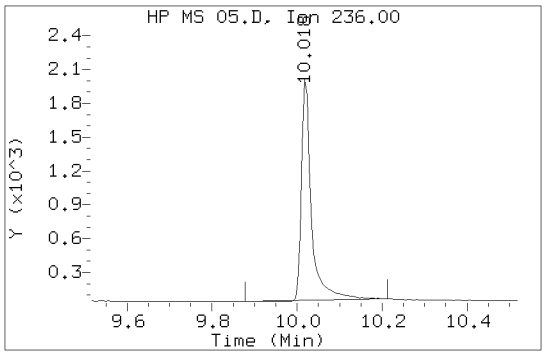
BEFORE

MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
236
AREA
3185
HEIGHT
1956
29-Jun-2023
14:26
ALSHS
Ser



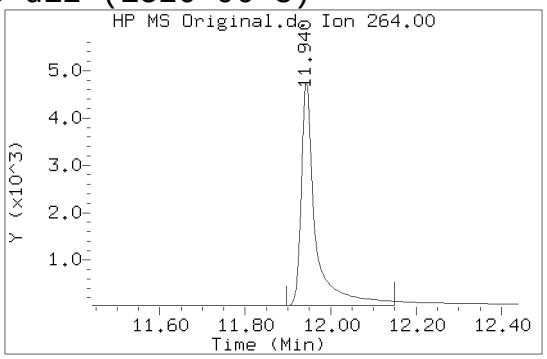
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Inj Date : 16-JUN-2023 11:26
InstruID : SV6.i
LabSampID : 14DXICAL-0.03

Perylene-d12 (1520-96-3)

Reason Code:

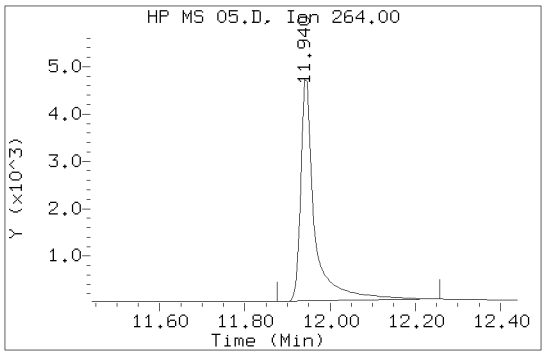
BEFORE

MASS
264
AREA
10829
HEIGHT
4681
16-Jun-2023
11:42
ALSHS
Server



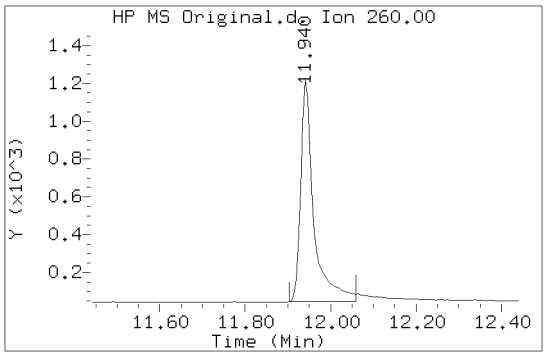
AFTER

MASS
264
AREA
10677
HEIGHT
4673
29-Jun-2023
14:26
ALSHS
Ser



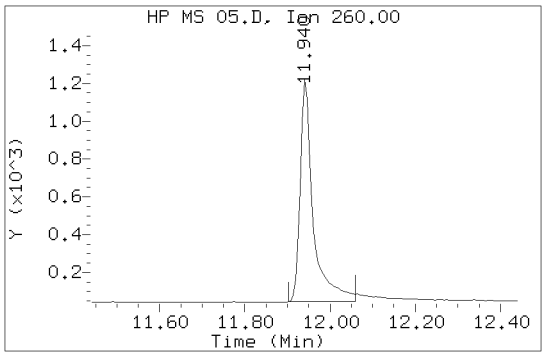
BEFORE

MASS
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AREA
2488
HEIGHT
1174
16-Jun-2023
11:42
ALSHS
Server



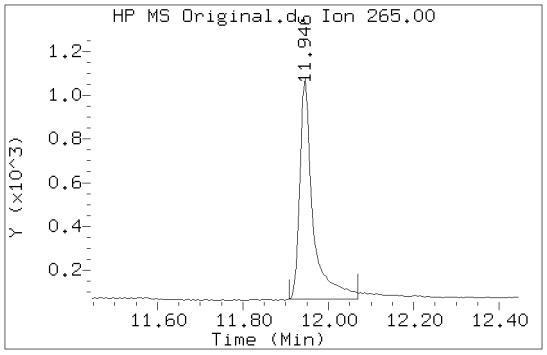
AFTER

MASS
260
AREA
2488
HEIGHT
1174
29-Jun-2023
14:26
ALSHS
Ser



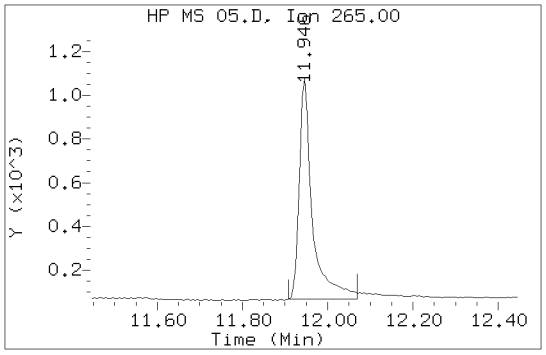
BEFORE

MASS
265
AREA
2154
HEIGHT
1009
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
265
AREA
2154
HEIGHT
1009
29-Jun-2023
14:26
ALSHS
Ser

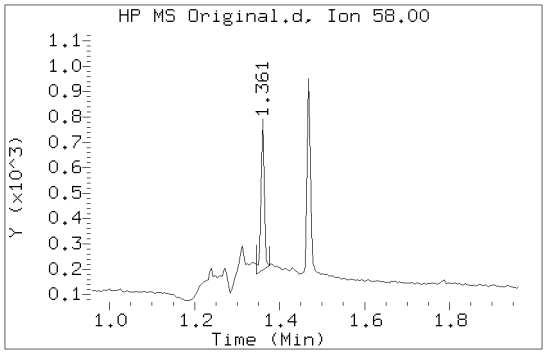


1,4-Dioxane ()

Reason Code:

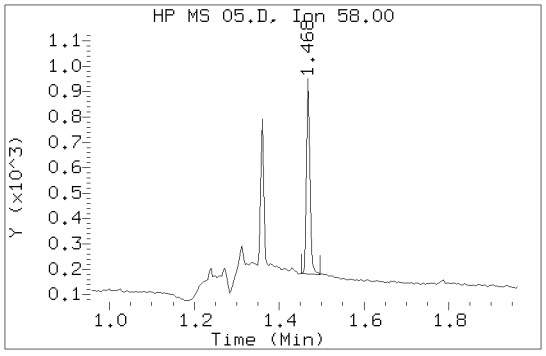
BEFORE

MASS
58
AREA
319
HEIGHT
594
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
58
AREA
426
HEIGHT
768
29-Jun-2023
14:26
ALSHS
Ser



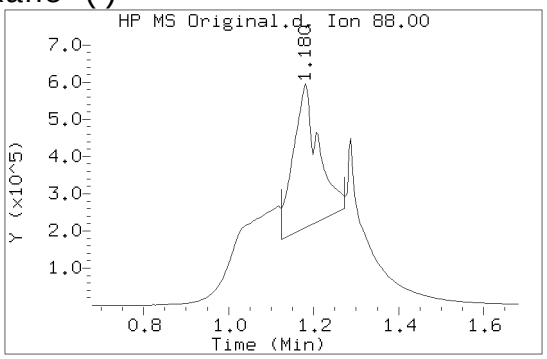
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Inj Date : 16-JUN-2023 11:26
InstruID : SV6.i
LabSampID : 14DXICAL-0.03

1,4-Dioxane ()

Reason Code:

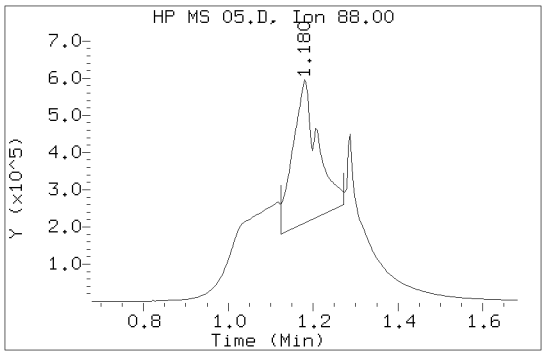
BEFORE

MASS
88
AREA
1599767
HEIGHT
386587
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
88
AREA
1591467
HEIGHT
385442
29-Jun-2023
14:26
ALSHS
Ser

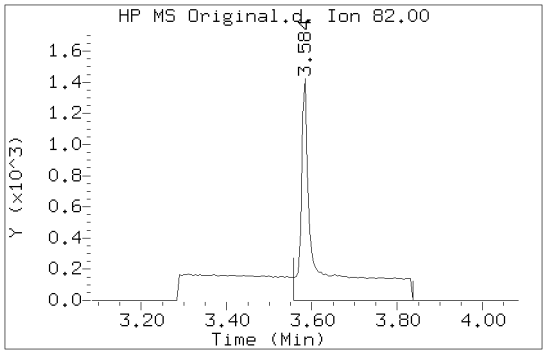


Nitrobenzene-d5 (4165-60-0)

Reason Code:

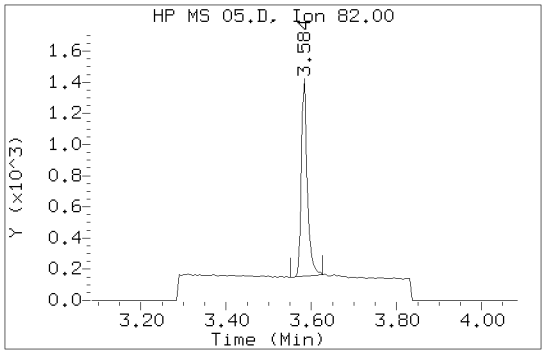
BEFORE

MASS
82
AREA
3739
HEIGHT
1423
16-Jun-2023
11:42
ALSHS
Server



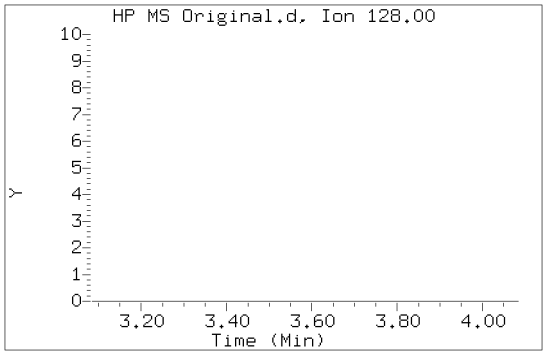
AFTER

MASS
82
AREA
1234
HEIGHT
1266
29-Jun-2023
14:26
ALSHS
Ser



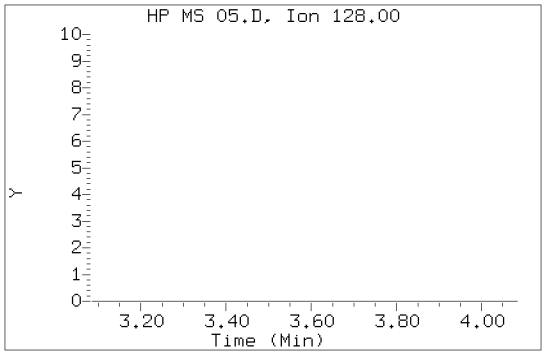
BEFORE

MASS
128
AREA
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HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



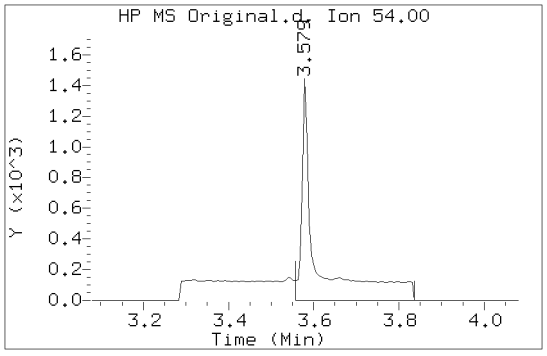
AFTER

MASS
128
AREA
0
HEIGHT
0
29-Jun-2023
14:26
ALSHS
Ser



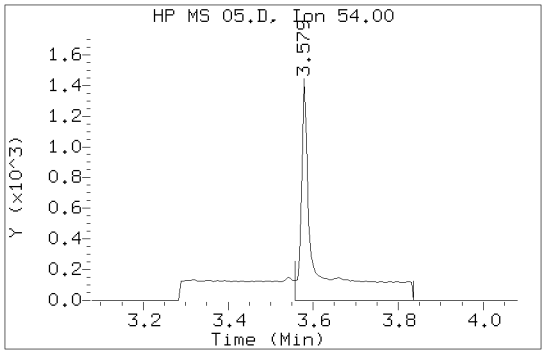
BEFORE

MASS
54
AREA
3364
HEIGHT
1444
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
54
AREA
3364
HEIGHT
1444
29-Jun-2023
14:26
ALSHS
Ser



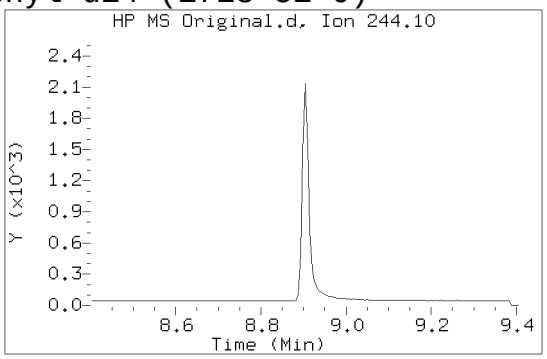
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Inj Date : 16-JUN-2023 11:26
InstruID : SV6.i
LabSampID : 14DXICAL-0.03

4-Terphenyl-d14 (1718-51-0)

Reason Code:

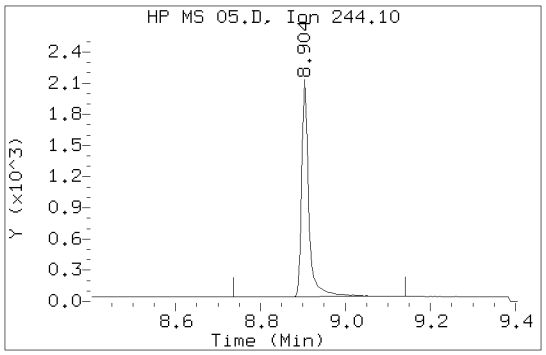
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



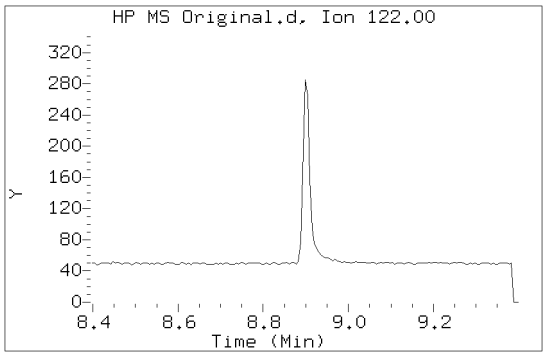
AFTER

MASS
244.1
AREA
2416
HEIGHT
2087
29-Jun-2023
14:26
ALSHS
Ser



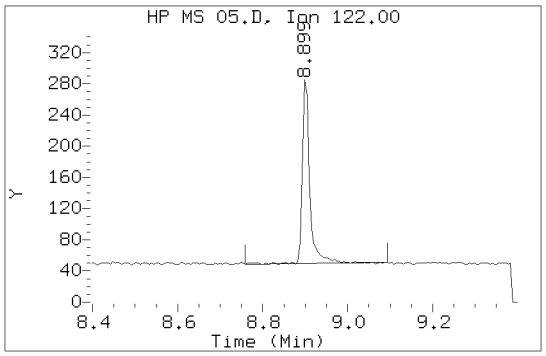
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



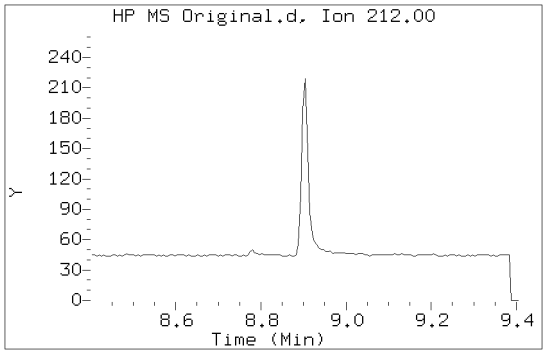
AFTER

MASS
122
AREA
278
HEIGHT
235
29-Jun-2023
14:26
ALSHS
Ser



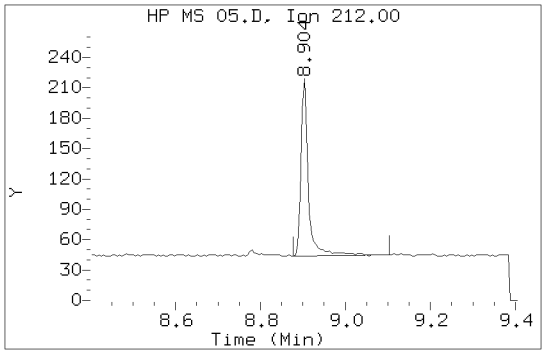
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
212
AREA
205
HEIGHT
174
29-Jun-2023
14:26
ALSHS
Ser

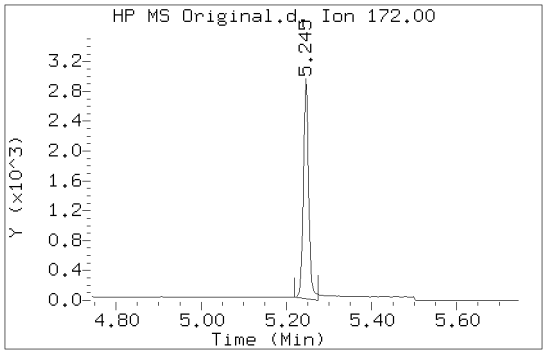


2-Fluorobiphenyl (321-60-8)

Reason Code:

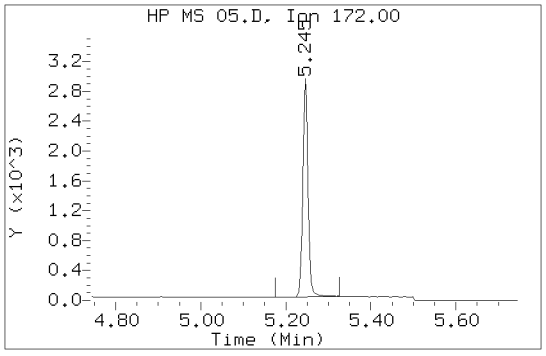
BEFORE

MASS
172
AREA
2588
HEIGHT
2943
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
172
AREA
2509
HEIGHT
2918
29-Jun-2023
14:26
ALSHS
Ser



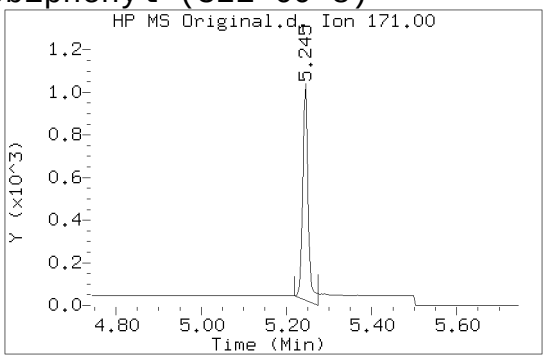
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\05.D
Inj Date : 16-JUN-2023 11:26
InstruID : SV6.i
LabSampID : 14DXICAL-0.03

2-Fluorobiphenyl (321-60-8)

Reason Code:

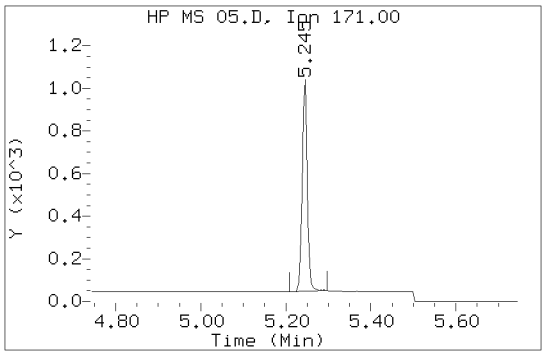
BEFORE

MASS
171
AREA
921
HEIGHT
1017
16-Jun-2023
11:42
ALSHS
Server



AFTER

MASS
171
AREA
834
HEIGHT
993
29-Jun-2023
14:26
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D Page 1
Report Date: 29-Jun-2023 14:27

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D
Lab Smp Id: 14DXICAL-0.05 Client Smp ID: 14DXICAL-0.05
Inj Date : 16-JUN-2023 11:44
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.05
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 11:26 Cal File: 05.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.128	(1.000)	5073	0.10000	(a)
* 45 Naphthalene-d8	136	4.216	4.216	(1.000)	17044	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.850)	2574	0.05000	0.04995(QM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	10027	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	4907	0.05000	0.04778(M)
* 126 Phenanthrene-d10	188	7.322	7.322	(1.000)	19800	0.10000	
* 182 Chrysene-d12	240	10.017	10.017	(1.000)	14524	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.904	8.904	(0.889)	4687	0.05000	0.04422(M)
* 198 Perylene-d12	264	11.940	11.940	(1.000)	12549	0.10000	(M)
1 1,4-Dioxane	58	1.486	1.486	(0.475)	828	0.05000	0.04846(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248616

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D

Date : 16-JUN-2023 11:44

Client ID: 14DXICAL-0.05

Instrument: SV6.i

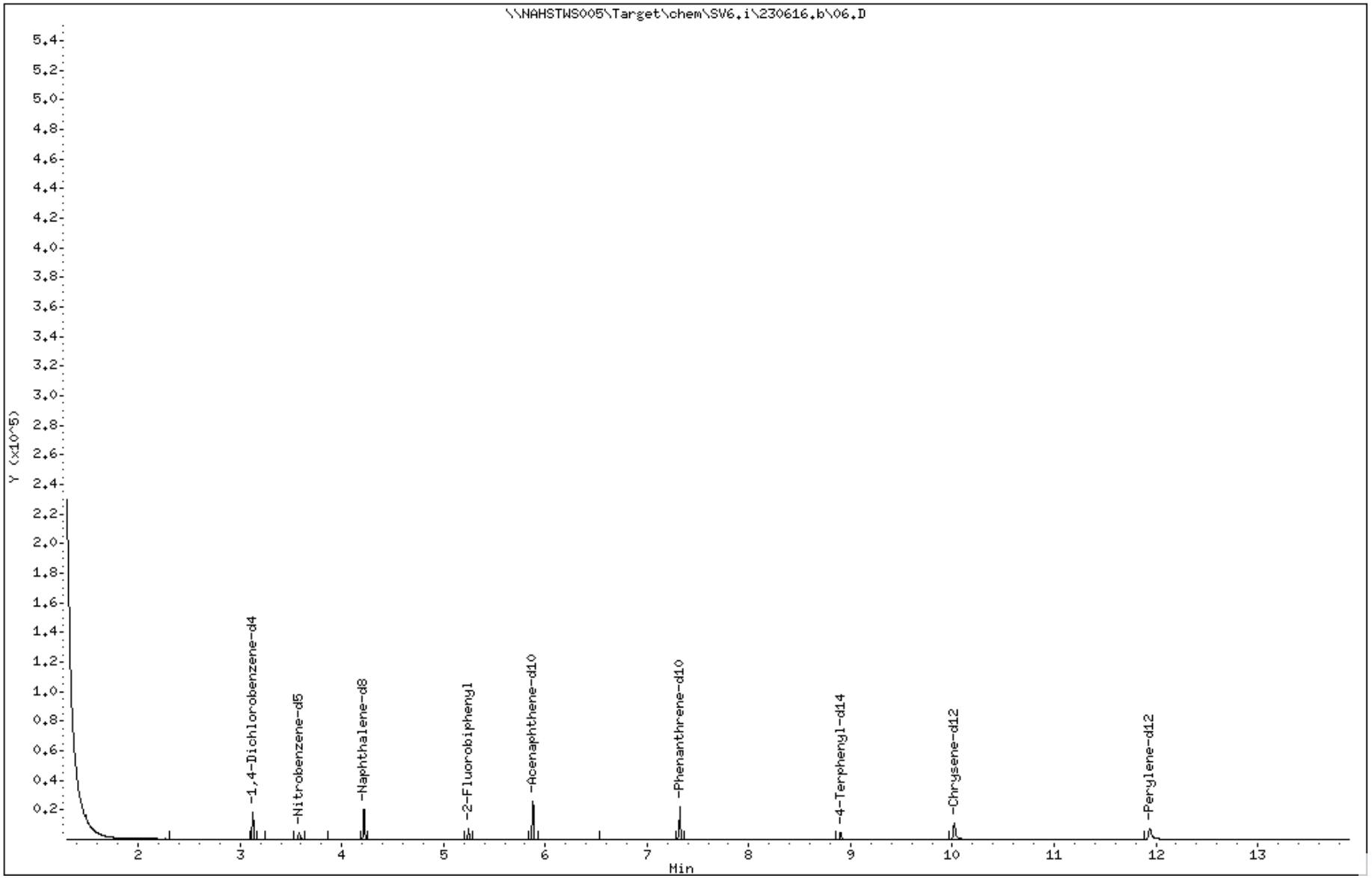
Sample Info: 14DXICAL-0.05

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



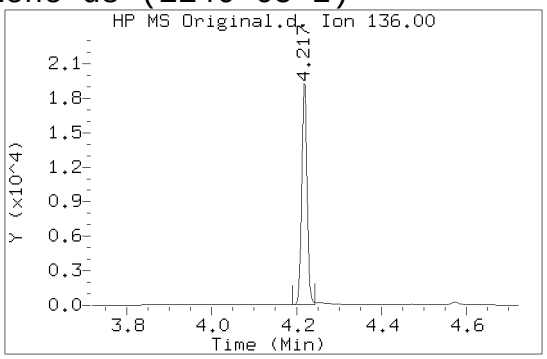
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D
Inj Date : 16-JUN-2023 11:44
InstruID : SV6.i
LabSampID : 14DXICAL-0.05

Naphthalene-d8 (1146-65-2)

Reason Code:

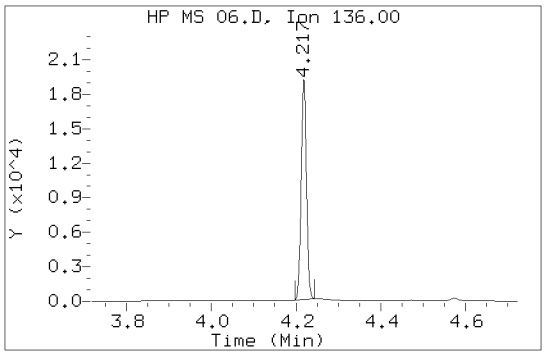
BEFORE

MASS
136
AREA
17378
HEIGHT
19211
16-Jun-2023
11:59
ALSHS
Server



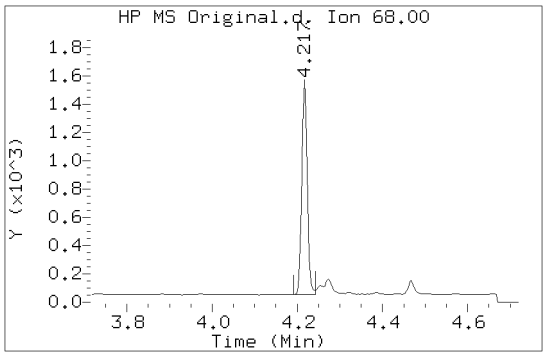
AFTER

MASS
136
AREA
17044
HEIGHT
19106
29-Jun-2023
14:26
ALSHS
Ser



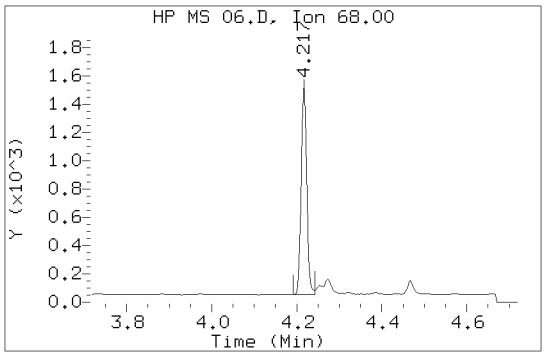
BEFORE

MASS
68
AREA
1330
HEIGHT
1515
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
68
AREA
1330
HEIGHT
1515
29-Jun-2023
14:26
ALSHS
Ser

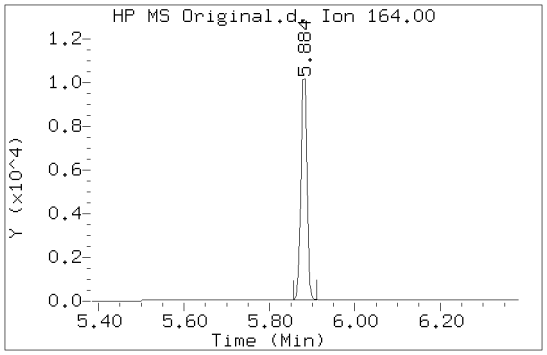


Acenaphthene-d10 (15067-26-2)

Reason Code:

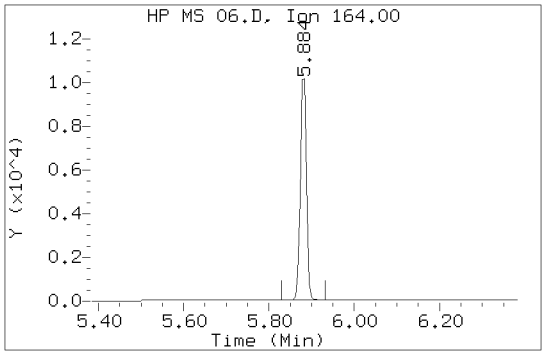
BEFORE

MASS
164
AREA
9969
HEIGHT
10109
16-Jun-2023
11:59
ALSHS
Server



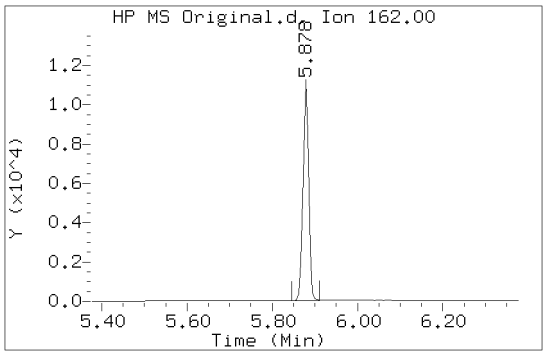
AFTER

MASS
164
AREA
10027
HEIGHT
10124
29-Jun-2023
14:26
ALSHS
Ser



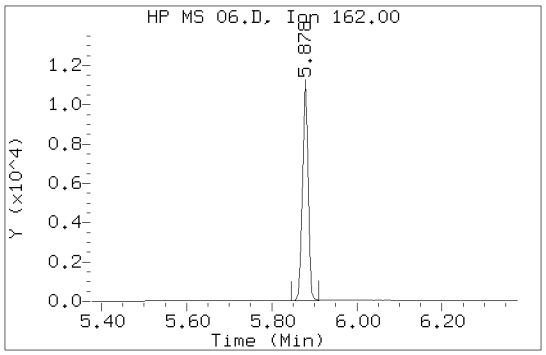
BEFORE

MASS
162
AREA
10122
HEIGHT
11230
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
162
AREA
10122
HEIGHT
11230
29-Jun-2023
14:26
ALSHS
Ser



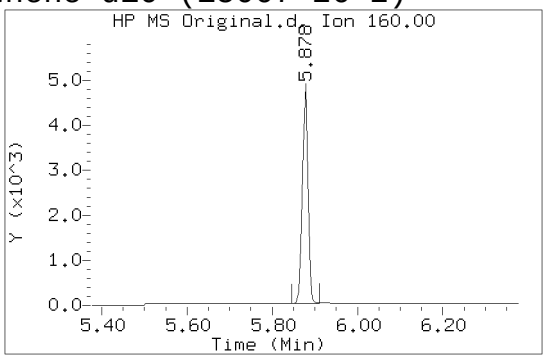
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Inj Date : 16-JUN-2023 11:44
InstruID : SV6.i
LabSampID : 14DXICAL-0.05

Acenaphthene-d10 (15067-26-2)

Reason Code:

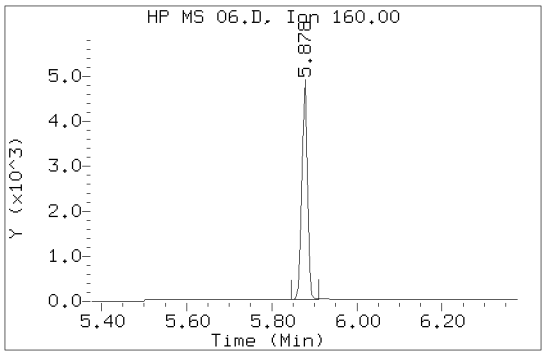
BEFORE

MASS
160
AREA
4359
HEIGHT
4881
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
160
AREA
4359
HEIGHT
4881
29-Jun-2023
14:26
ALSHS
Ser

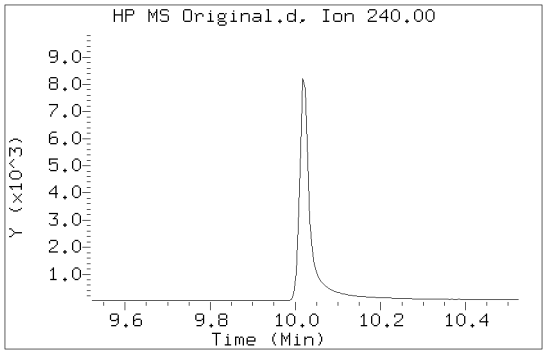


Chrysene-d12 (1719-03-5)

Reason Code:

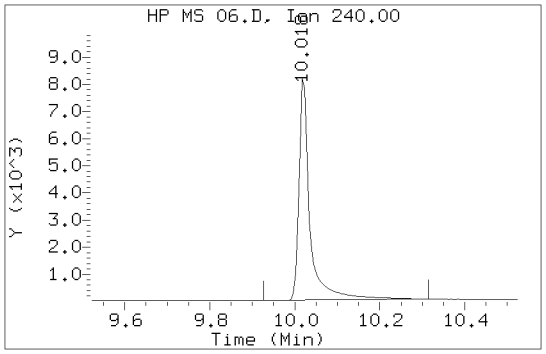
BEFORE

MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



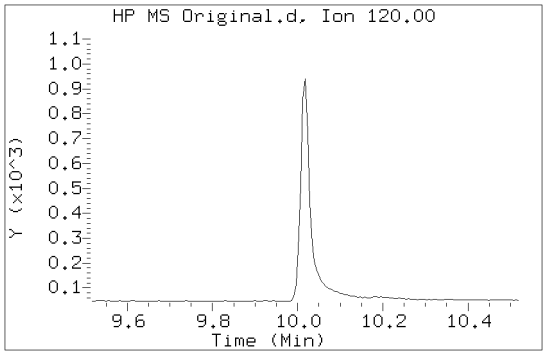
AFTER

MASS
240
AREA
14524
HEIGHT
8152
29-Jun-2023
14:26
ALSHS
Ser



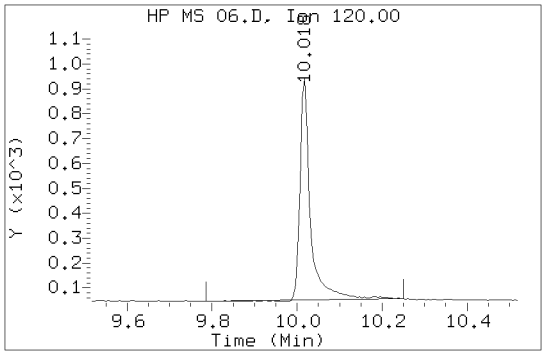
BEFORE

MASS
120
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



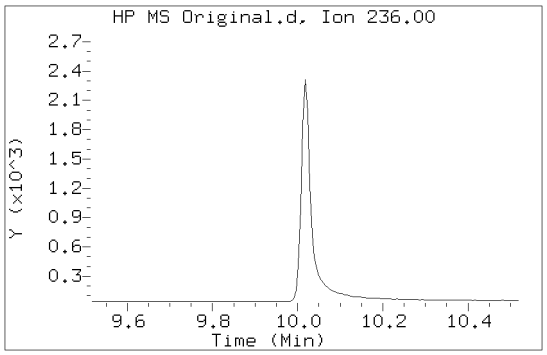
AFTER

MASS
120
AREA
1511
HEIGHT
888
29-Jun-2023
14:26
ALSHS
Ser



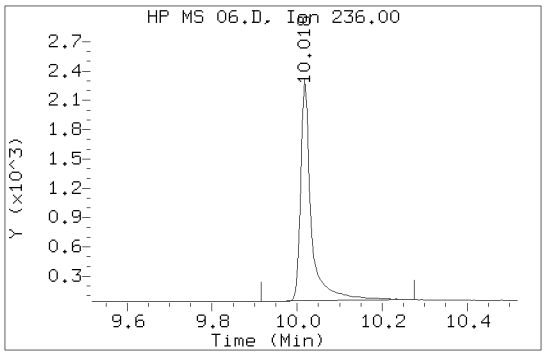
BEFORE

MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
236
AREA
3903
HEIGHT
2262
29-Jun-2023
14:26
ALSHS
Ser



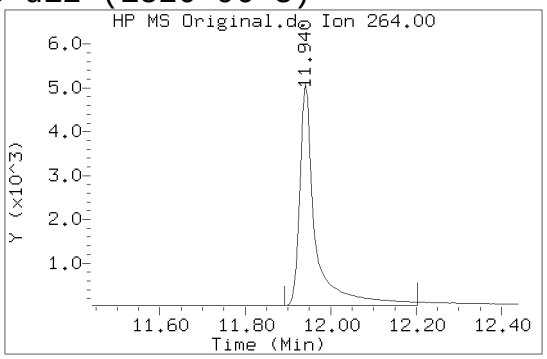
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D
Inj Date : 16-JUN-2023 11:44
InstruID : SV6.i
LabSampID : 14DXICAL-0.05

Perylene-d12 (1520-96-3)

Reason Code:

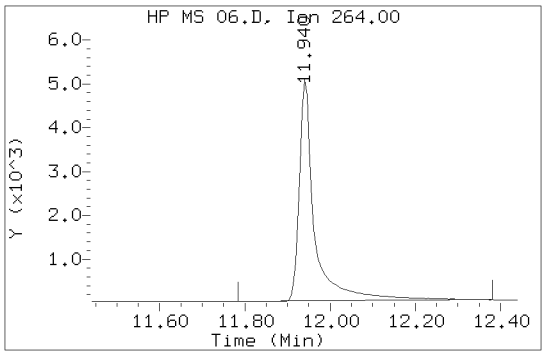
BEFORE

MASS
264
AREA
12686
HEIGHT
5050
16-Jun-2023
11:59
ALSHS
Server



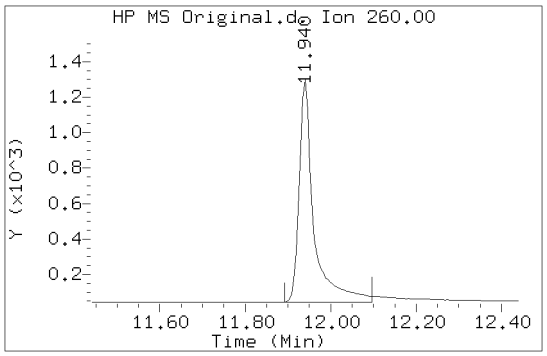
AFTER

MASS
264
AREA
12549
HEIGHT
5041
29-Jun-2023
14:26
ALSHS
Ser



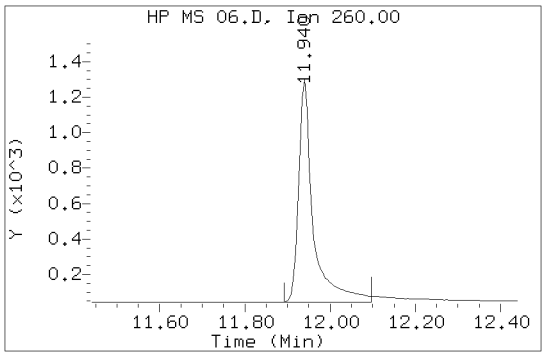
BEFORE

MASS
260
AREA
2978
HEIGHT
1253
16-Jun-2023
11:59
ALSHS
Server



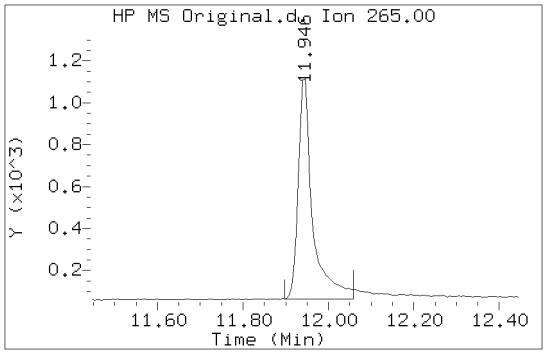
AFTER

MASS
260
AREA
2978
HEIGHT
1253
29-Jun-2023
14:26
ALSHS
Ser



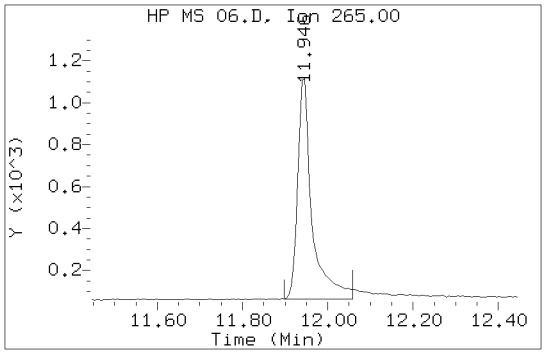
BEFORE

MASS
265
AREA
2473
HEIGHT
1053
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
265
AREA
2473
HEIGHT
1053
29-Jun-2023
14:26
ALSHS
Ser

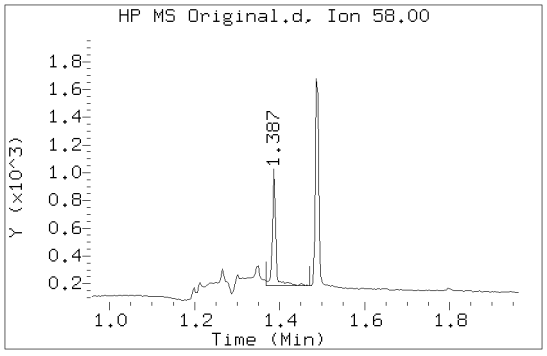


1,4-Dioxane ()

Reason Code:

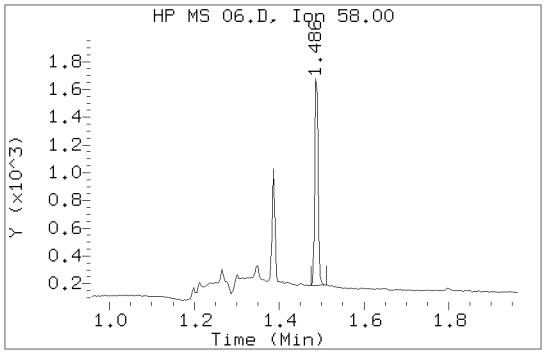
BEFORE

MASS
58
AREA
474
HEIGHT
839
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
58
AREA
828
HEIGHT
1488
29-Jun-2023
14:26
ALSHS
Ser



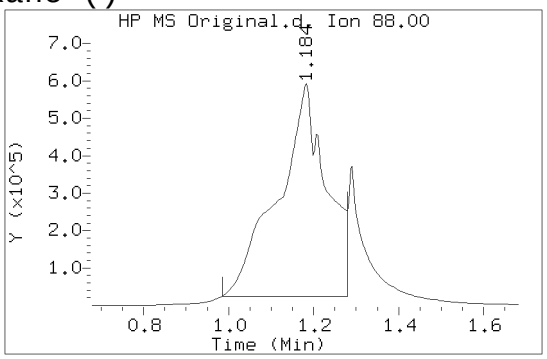
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D
Inj Date : 16-JUN-2023 11:44
InstruID : SV6.i
LabSampID : 14DXICAL-0.05

1,4-Dioxane ()

Reason Code:

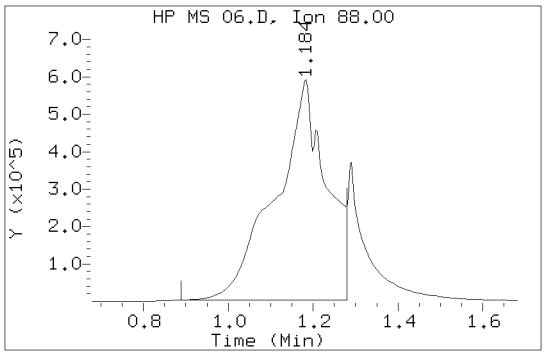
BEFORE

MASS
88
AREA
4490753
HEIGHT
567696
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
88
AREA
4905096
HEIGHT
589066
29-Jun-2023
14:26
ALSHS
Ser

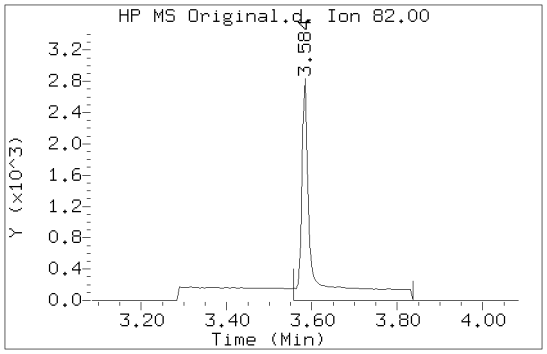


Nitrobenzene-d5 (4165-60-0)

Reason Code:

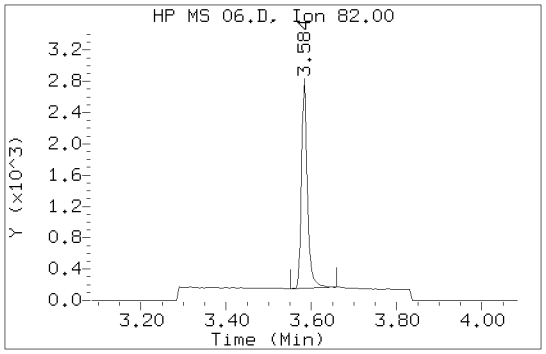
BEFORE

MASS
82
AREA
5121
HEIGHT
2833
16-Jun-2023
11:59
ALSHS
Server



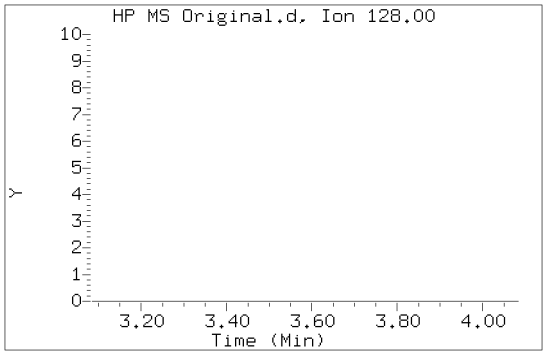
AFTER

MASS
82
AREA
2574
HEIGHT
2676
29-Jun-2023
14:26
ALSHS
Ser



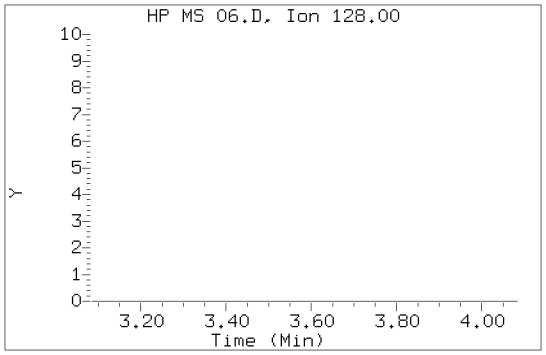
BEFORE

MASS
128
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



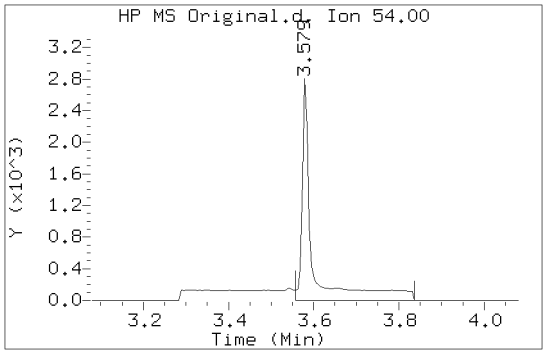
AFTER

MASS
128
AREA
0
HEIGHT
0
29-Jun-2023
14:26
ALSHS
Ser



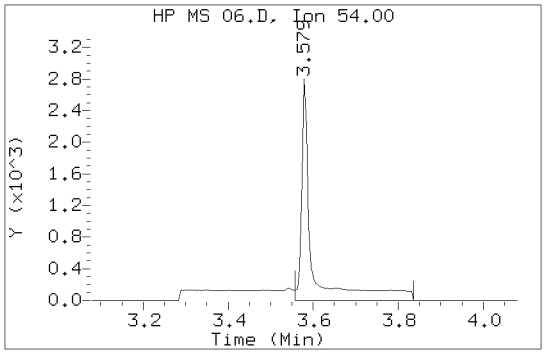
BEFORE

MASS
54
AREA
4709
HEIGHT
2805
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
54
AREA
4709
HEIGHT
2805
29-Jun-2023
14:26
ALSHS
Ser



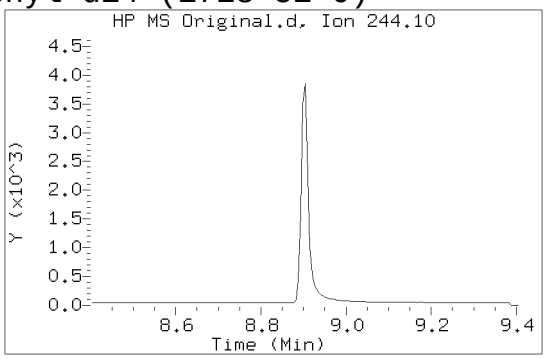
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\06.D
Inj Date : 16-JUN-2023 11:44
InstruID : SV6.i
LabSampID : 14DXICAL-0.05

4-Terphenyl-d14 (1718-51-0)

Reason Code:

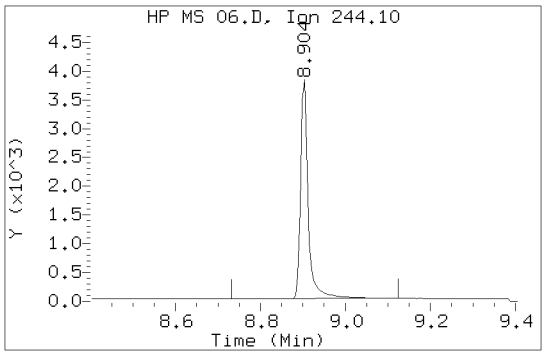
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



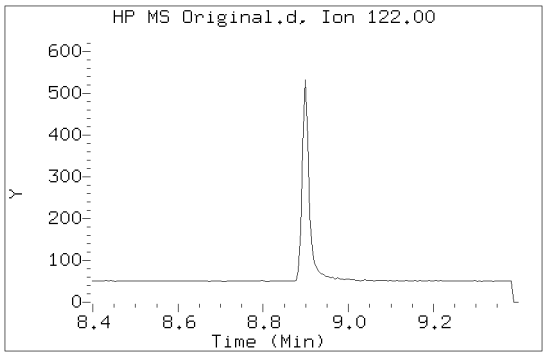
AFTER

MASS
244.1
AREA
4687
HEIGHT
3802
29-Jun-2023
14:26
ALSHS
Ser



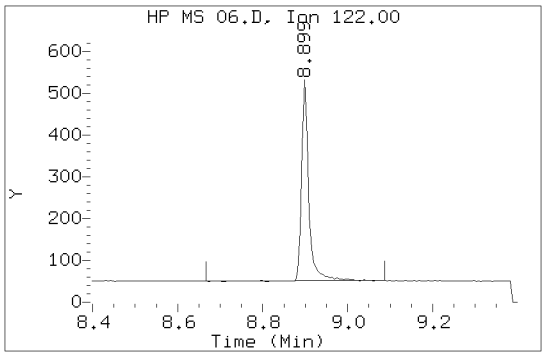
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



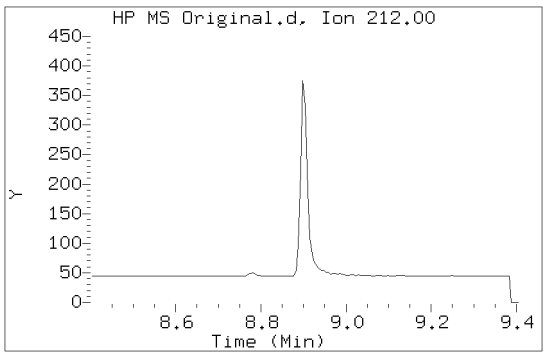
AFTER

MASS
122
AREA
540
HEIGHT
480
29-Jun-2023
14:26
ALSHS
Ser



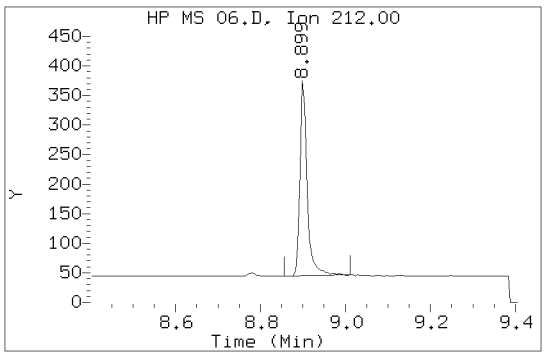
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
212
AREA
383
HEIGHT
330
29-Jun-2023
14:26
ALSHS
Ser

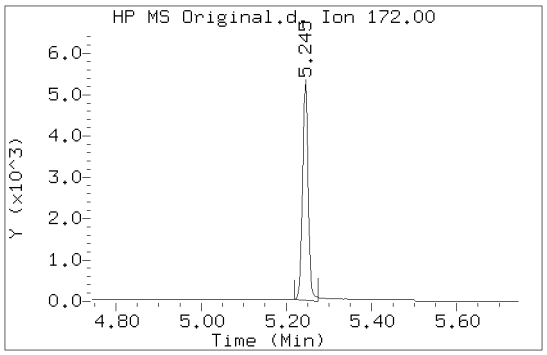


2-Fluorobiphenyl (321-60-8)

Reason Code:

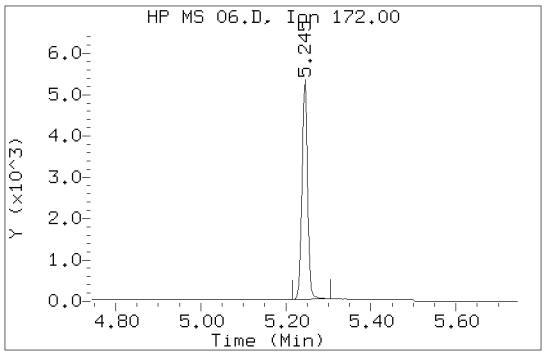
BEFORE

MASS
172
AREA
4989
HEIGHT
5338
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
172
AREA
4907
HEIGHT
5312
29-Jun-2023
14:26
ALSHS
Ser



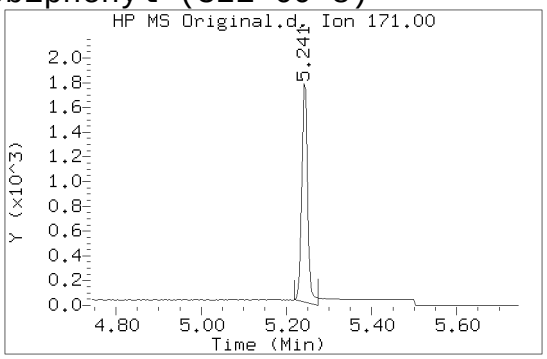
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Inj Date : 16-JUN-2023 11:44
InstruID : SV6.i
LabSampID : 14DXICAL-0.05

2-Fluorobiphenyl (321-60-8)

Reason Code:

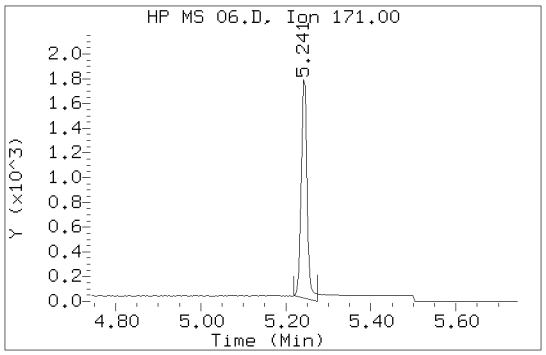
BEFORE

MASS
171
AREA
1727
HEIGHT
1764
16-Jun-2023
11:59
ALSHS
Server



AFTER

MASS
171
AREA
1727
HEIGHT
1764
29-Jun-2023
14:26
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\07.D Page 1
Report Date: 29-Jun-2023 14:27

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\07.D
Lab Smp Id: 14DXICAL-0.08 Client Smp ID: 14DXICAL-0.08
Inj Date : 16-JUN-2023 12:02
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.08
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 11:44 Cal File: 06.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.128	(1.000)	4590	0.10000	(a)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	15619	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	4012	0.08000	0.08496(M)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	9075	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	7759	0.08000	0.08348
* 126 Phenanthrene-d10	188	7.322	7.322	(1.000)	18261	0.10000	
* 182 Chrysene-d12	240	10.017	10.017	(1.000)	12097	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.904	8.904	(0.889)	7185	0.08000	0.08138(M)
* 198 Perylene-d12	264	11.940	11.940	(1.000)	10759	0.10000	(M)
1 1,4-Dioxane	58	1.482	1.482	(0.474)	1283	0.08000	0.08298(QH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01248624

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\07.D

Date : 16-JUN-2023 12:02

Client ID: 14DXICAL-0.08

Instrument: SV6.i

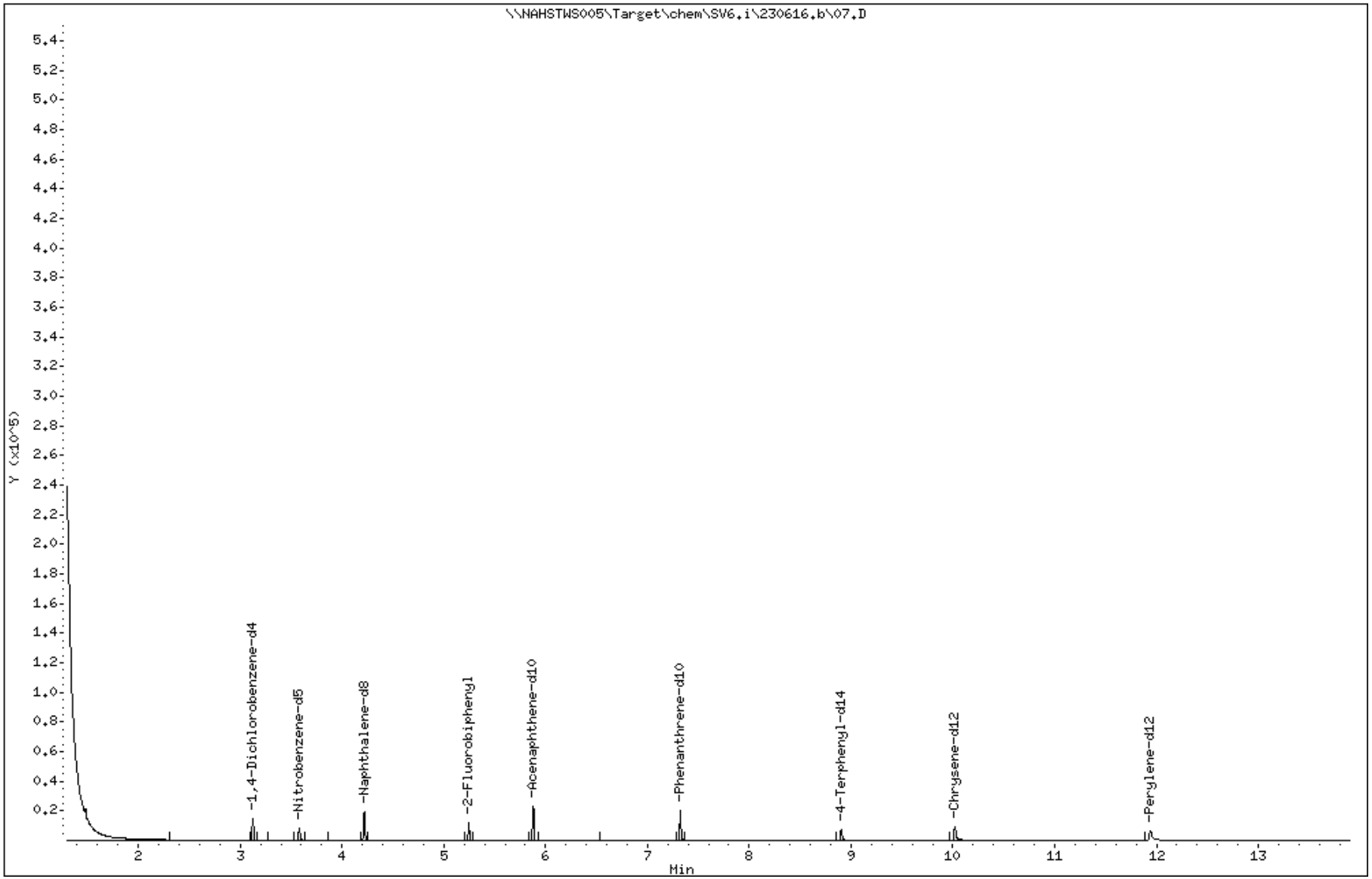
Sample Info: 14DXICAL-0.08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



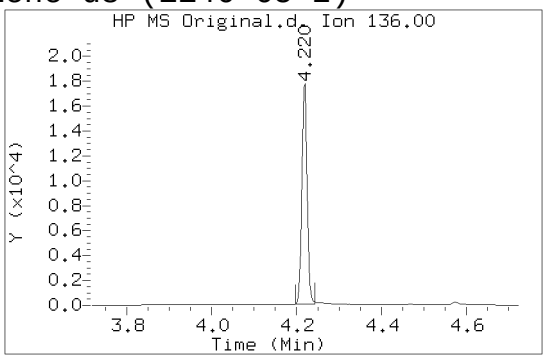
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\07.D
Inj Date : 16-JUN-2023 12:02
InstruID : SV6.i
LabSampID : 14DXICAL-0.08

Naphthalene-d8 (1146-65-2)

Reason Code:

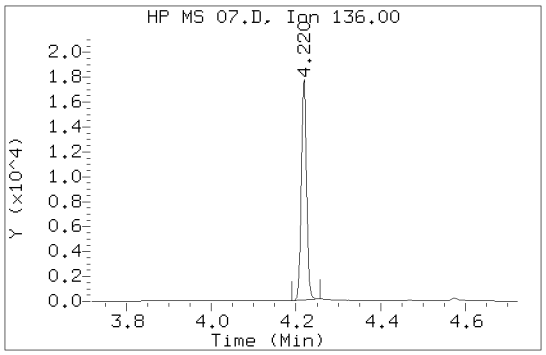
BEFORE

MASS
136
AREA
15744
HEIGHT
17718
16-Jun-2023
12:18
ALSHS
Server



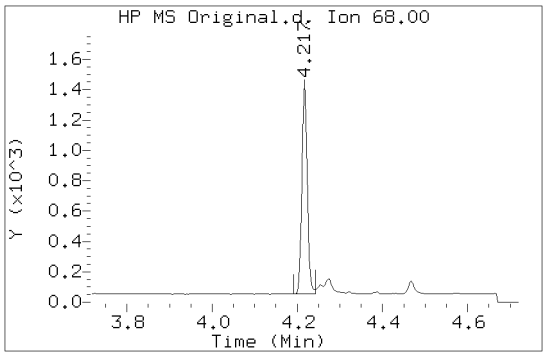
AFTER

MASS
136
AREA
15619
HEIGHT
17670
29-Jun-2023
14:26
ALSHS
Ser



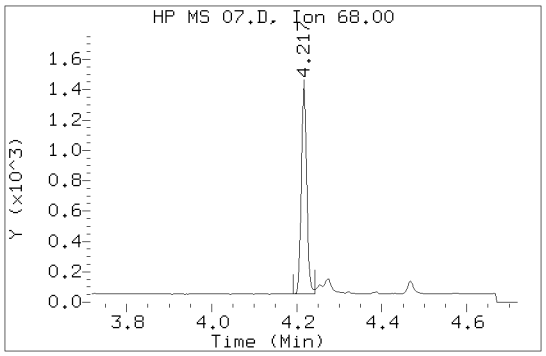
BEFORE

MASS
68
AREA
1209
HEIGHT
1411
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
68
AREA
1209
HEIGHT
1411
29-Jun-2023
14:26
ALSHS
Ser

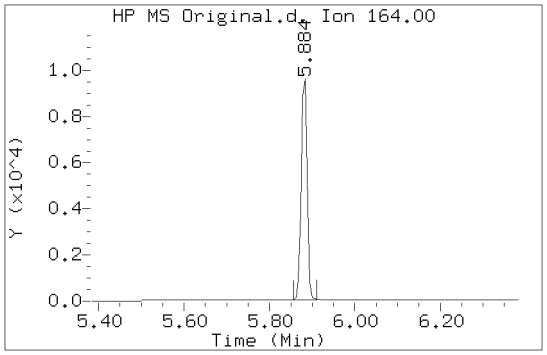


Acenaphthene-d10 (15067-26-2)

Reason Code:

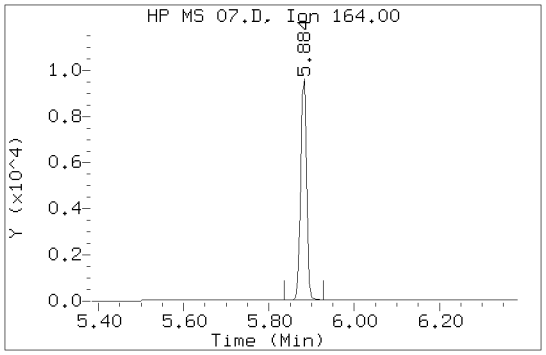
BEFORE

MASS
164
AREA
9060
HEIGHT
9568
16-Jun-2023
12:18
ALSHS
Server



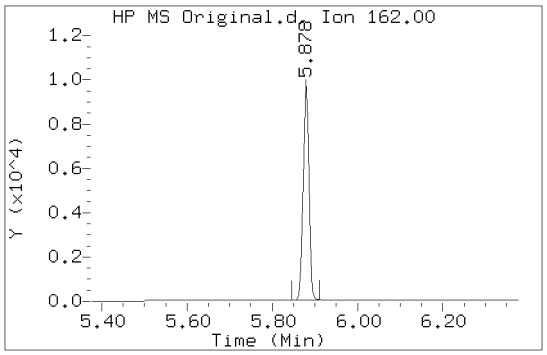
AFTER

MASS
164
AREA
9075
HEIGHT
9571
29-Jun-2023
14:26
ALSHS
Ser



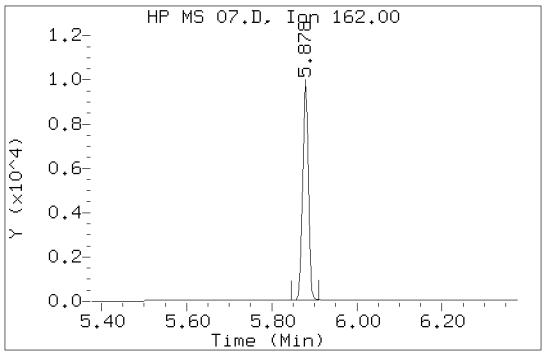
BEFORE

MASS
162
AREA
9173
HEIGHT
9961
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
162
AREA
9173
HEIGHT
9961
29-Jun-2023
14:26
ALSHS
Ser



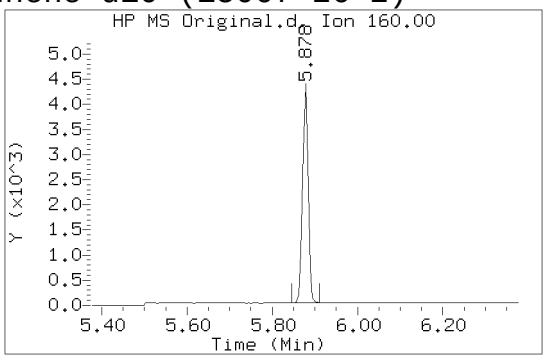
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Inj Date : 16-JUN-2023 12:02
InstruID : SV6.i
LabSampID : 14DXICAL-0.08

Acenaphthene-d10 (15067-26-2)

Reason Code:

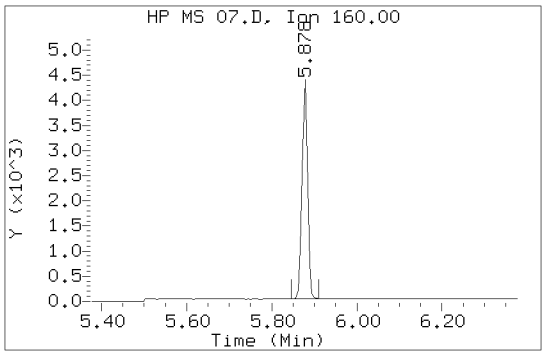
BEFORE

MASS
160
AREA
3928
HEIGHT
4365
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
160
AREA
3928
HEIGHT
4365
29-Jun-2023
14:26
ALSHS
Ser

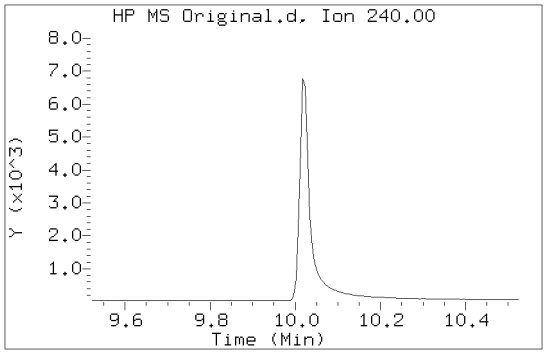


Chrysene-d12 (1719-03-5)

Reason Code:

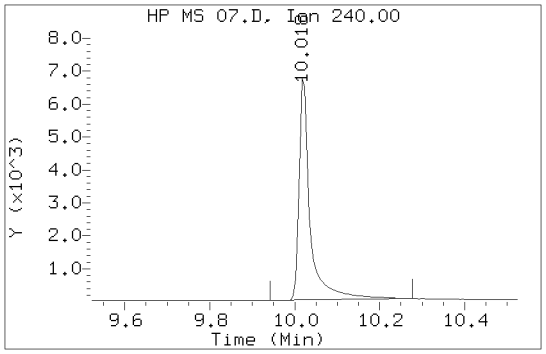
BEFORE

MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



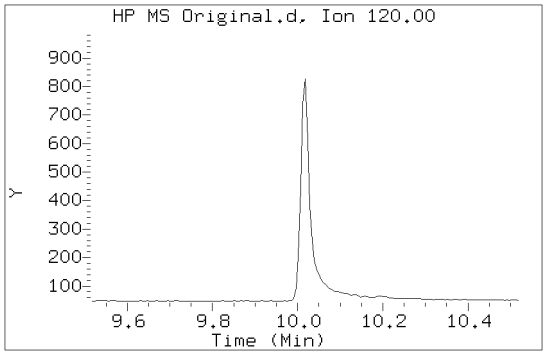
AFTER

MASS
240
AREA
12097
HEIGHT
6713
29-Jun-2023
14:26
ALSHS
Ser



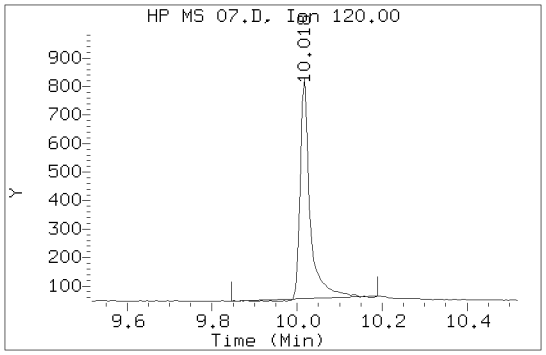
BEFORE

MASS
120
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



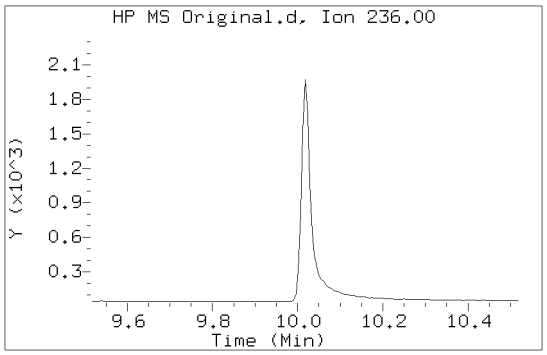
AFTER

MASS
120
AREA
1207
HEIGHT
771
29-Jun-2023
14:26
ALSHS
Ser



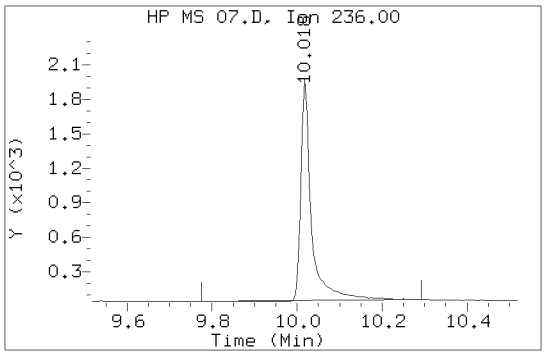
BEFORE

MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
236
AREA
3279
HEIGHT
1919
29-Jun-2023
14:26
ALSHS
Ser



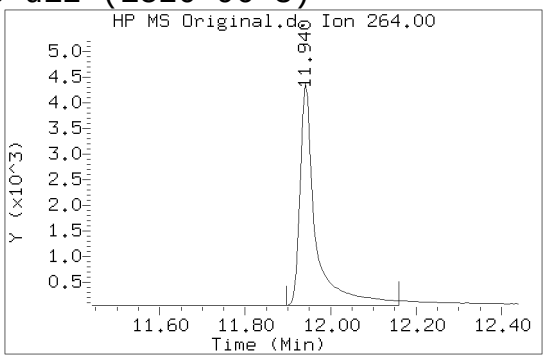
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\07.D
Inj Date : 16-JUN-2023 12:02
InstruID : SV6.i
LabSampID : 14DXICAL-0.08

Perylene-d12 (1520-96-3)

Reason Code:

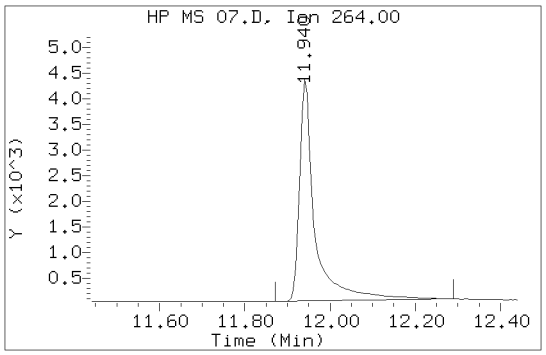
BEFORE

MASS
264
AREA
10879
HEIGHT
4324
16-Jun-2023
12:18
ALSHS
Server



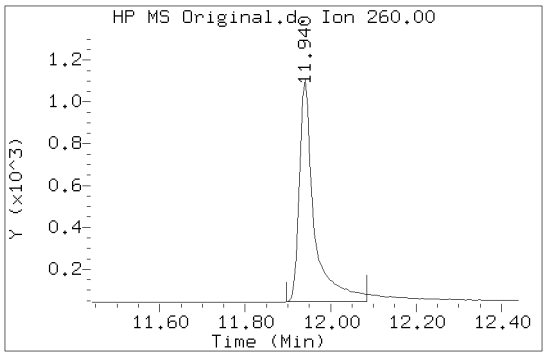
AFTER

MASS
264
AREA
10759
HEIGHT
4317
29-Jun-2023
14:26
ALSHS
Ser



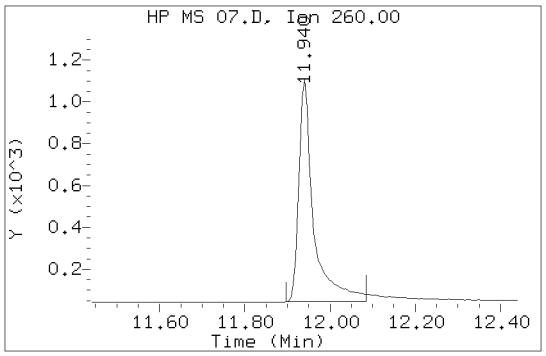
BEFORE

MASS
260
AREA
2559
HEIGHT
1060
16-Jun-2023
12:18
ALSHS
Server



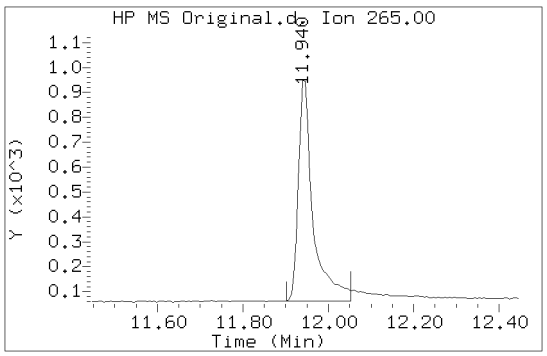
AFTER

MASS
260
AREA
2559
HEIGHT
1060
29-Jun-2023
14:26
ALSHS
Ser



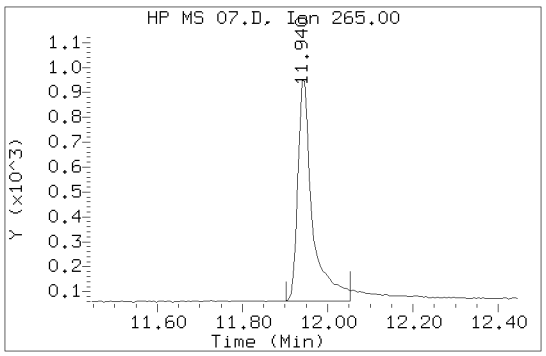
BEFORE

MASS
265
AREA
2115
HEIGHT
884
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
265
AREA
2115
HEIGHT
884
29-Jun-2023
14:26
ALSHS
Ser

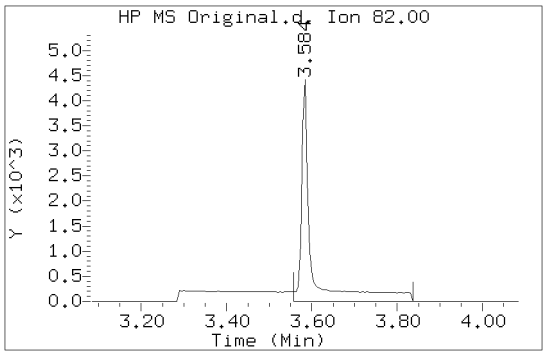


Nitrobenzene-d5 (4165-60-0)

Reason Code:

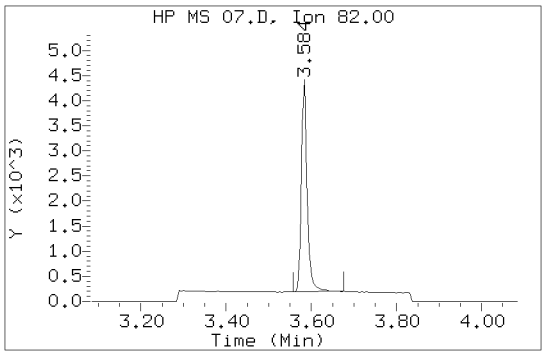
BEFORE

MASS
82
AREA
7140
HEIGHT
4418
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
82
AREA
4012
HEIGHT
4226
29-Jun-2023
14:26
ALSHS
Ser



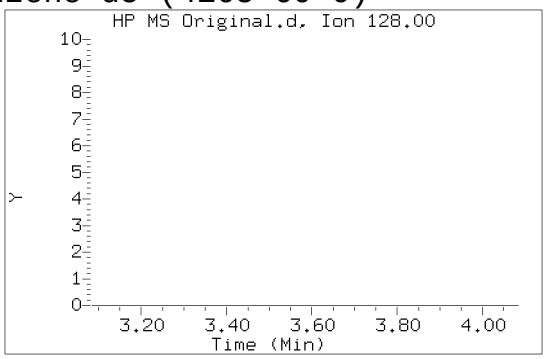
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\07.D
Inj Date : 16-JUN-2023 12:02
InstruID : SV6.i
LabSampID : 14DXICAL-0.08

Nitrobenzene-d5 (4165-60-0)

Reason Code:

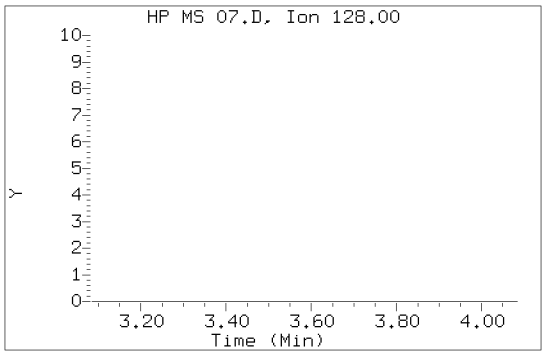
BEFORE

MASS
128
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



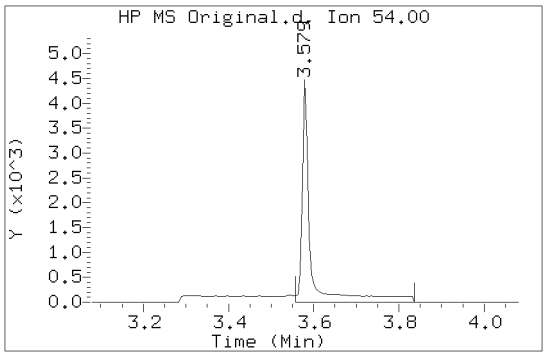
AFTER

MASS
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AREA
0
HEIGHT
0
29-Jun-2023
14:26
ALSHS
Ser



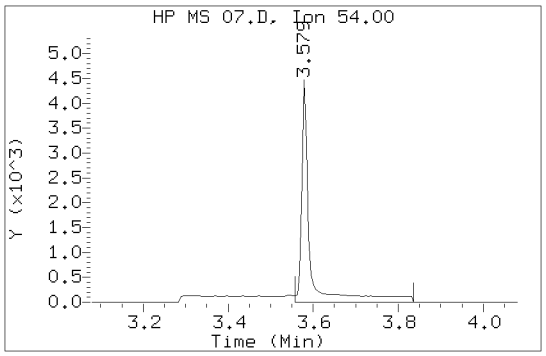
BEFORE

MASS
54
AREA
6137
HEIGHT
4470
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
54
AREA
6137
HEIGHT
4470
29-Jun-2023
14:26
ALSHS
Ser

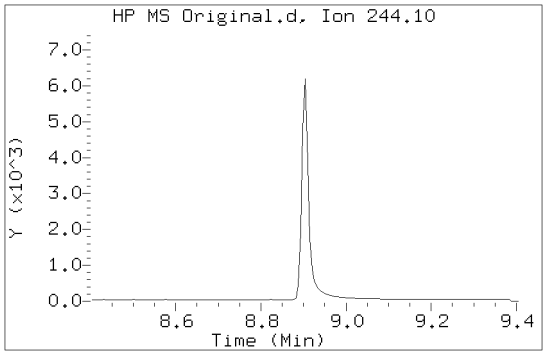


4-Terphenyl-d14 (1718-51-0)

Reason Code:

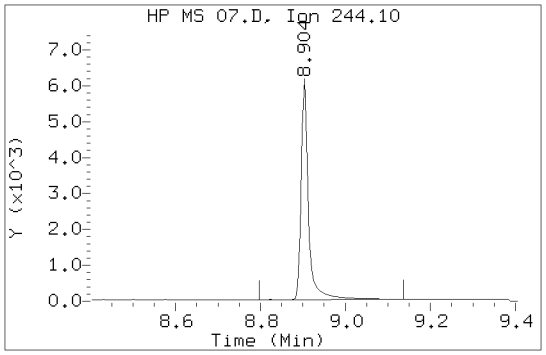
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



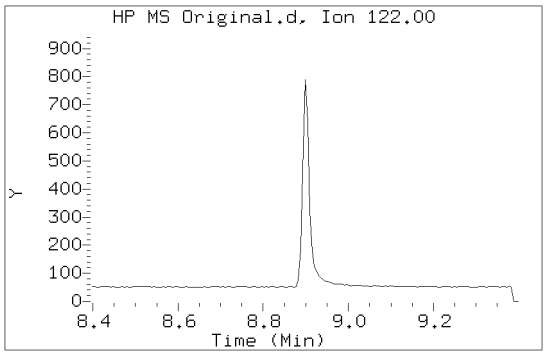
AFTER

MASS
244.1
AREA
7185
HEIGHT
6143
29-Jun-2023
14:26
ALSHS
Ser



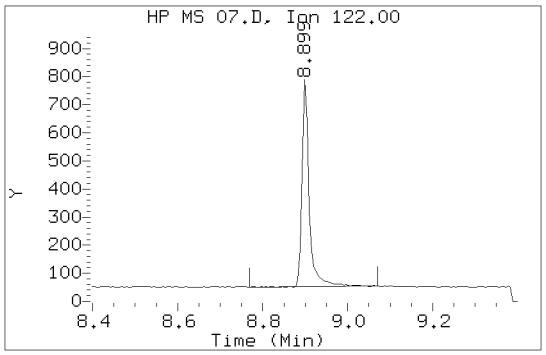
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
122
AREA
850
HEIGHT
736
29-Jun-2023
14:26
ALSHS
Ser



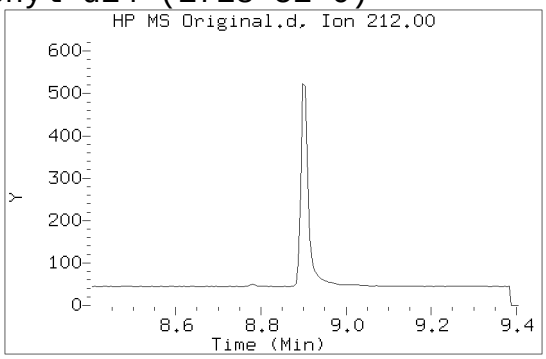
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Inj Date : 16-JUN-2023 12:02
InstruID : SV6.i
LabSampID : 14DXICAL-0.08

4-Terphenyl-d14 (1718-51-0)

Reason Code:

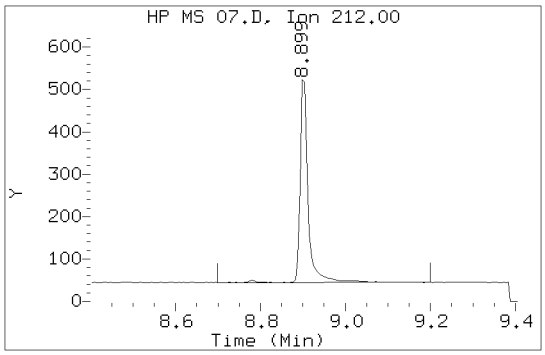
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
12:18
ALSHS
Server



AFTER

MASS
212
AREA
622
HEIGHT
478
29-Jun-2023
14:26
ALSHS
Ser



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\09.D
Lab Smp Id: 14DXICAL-0.15 Client Smp ID: 14DXICAL-0.15
Inj Date : 16-JUN-2023 12:38
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.15
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 12:20 Cal File: 08.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.128	(1.000)	3901	0.10000	(aM)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	13349	0.10000	
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	6134	0.15000	0.1520(AQM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	7708	0.10000	
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	11636	0.15000	0.1474
* 126 Phenanthrene-d10	188	7.323	7.323	(1.000)	15157	0.10000	
* 182 Chrysene-d12	240	10.018	10.018	(1.000)	10131	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.904	8.904	(0.889)	10881	0.15000	0.1472(M)
* 198 Perylene-d12	264	11.940	11.940	(1.000)	7987	0.10000	(M)
1 1,4-Dioxane	58	1.464	1.464	(0.468)	1980	0.15000	0.1507(QH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01248632

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\09.D

Page 1

Date : 16-JUN-2023 12:38

Client ID: 14DXICAL-0.15

Instrument: SV6.i

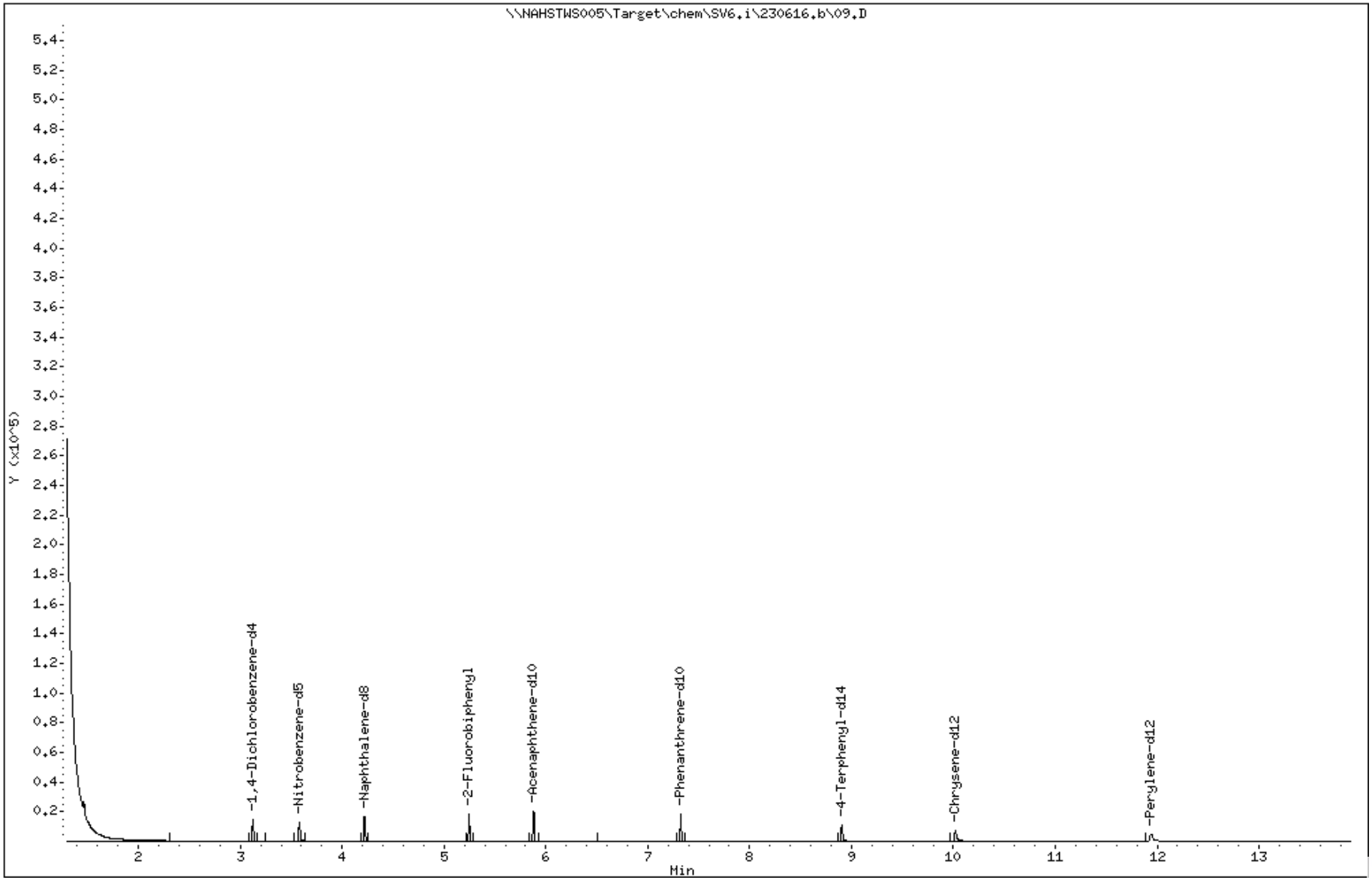
Sample Info: 14DXICAL-0.15

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



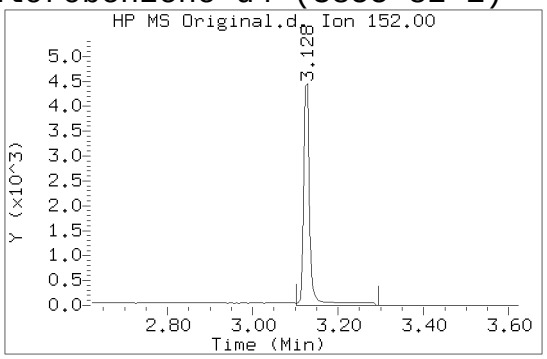
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\09.D
Inj Date : 16-JUN-2023 12:38
InstruID : SV6.i
LabSampID : 14DXICAL-0.15

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

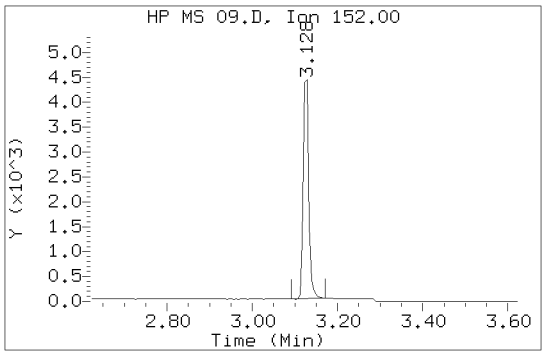
BEFORE

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AREA
4505
HEIGHT
4453
16-Jun-2023
12:57
ALSHS
Server



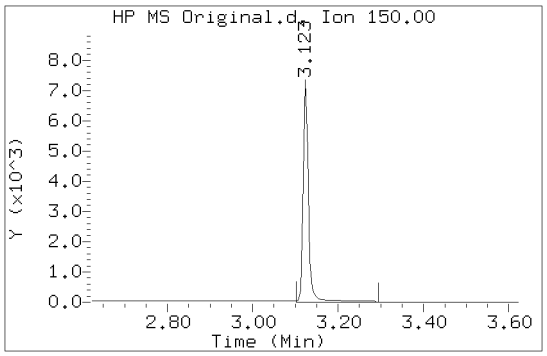
AFTER

MASS
152
AREA
3901
HEIGHT
4398
29-Jun-2023
14:27
ALSHS
Ser



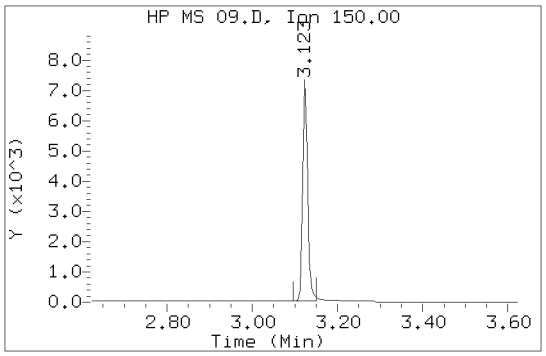
BEFORE

MASS
150
AREA
6326
HEIGHT
7351
16-Jun-2023
12:57
ALSHS
Server



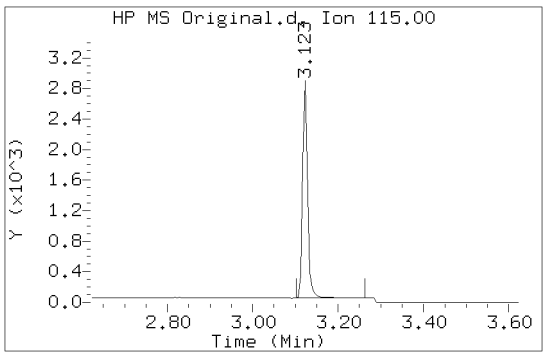
AFTER

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AREA
5706
HEIGHT
7305
29-Jun-2023
14:27
ALSHS
Ser



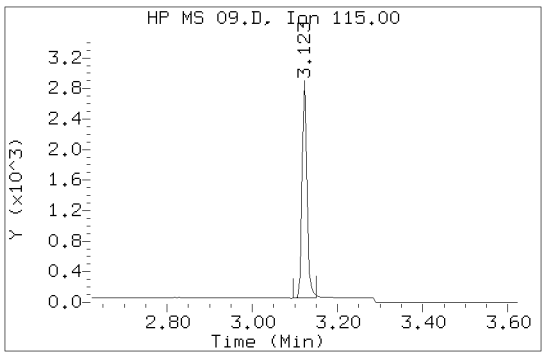
BEFORE

MASS
115
AREA
2255
HEIGHT
2847
16-Jun-2023
12:57
ALSHS
Server



AFTER

MASS
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AREA
2210
HEIGHT
2846
29-Jun-2023
14:27
ALSHS
Ser

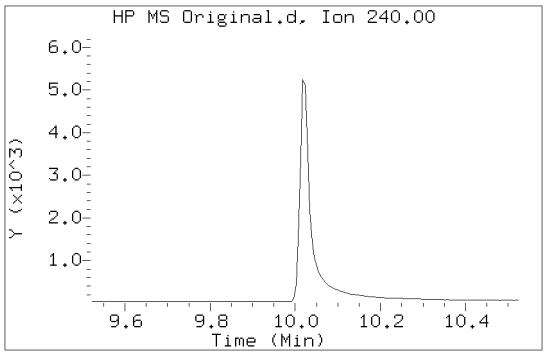


Chrysene-d12 (1719-03-5)

Reason Code:

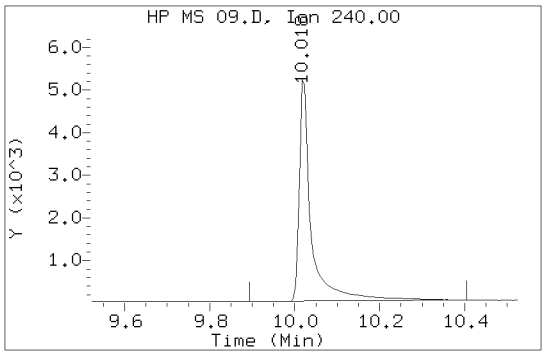
BEFORE

MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



AFTER

MASS
240
AREA
10131
HEIGHT
5190
29-Jun-2023
14:27
ALSHS
Ser

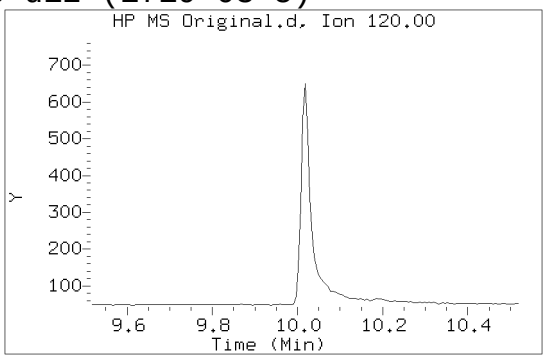


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Inj Date : 16-JUN-2023 12:38
InstruID : SV6.i
LabSampID : 14DXICAL-0.15

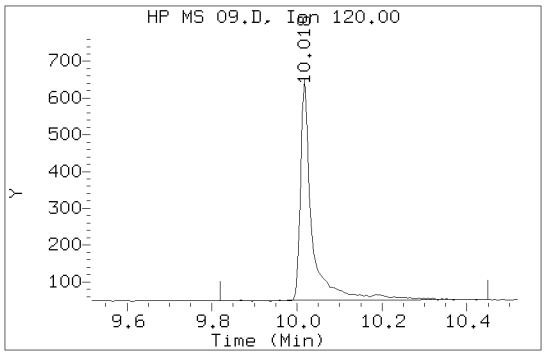
Chrysene-d12 (1719-03-5)

Reason Code:

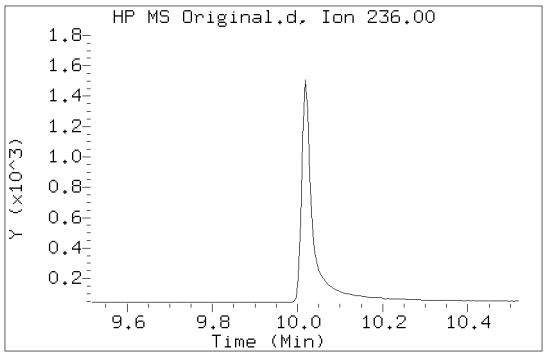
BEFORE
MASS
120
AREA
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HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



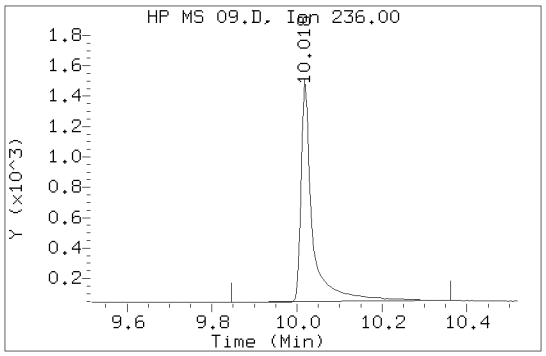
AFTER
MASS
120
AREA
1131
HEIGHT
600
29-Jun-2023
14:27
ALSHS
Ser



BEFORE
MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



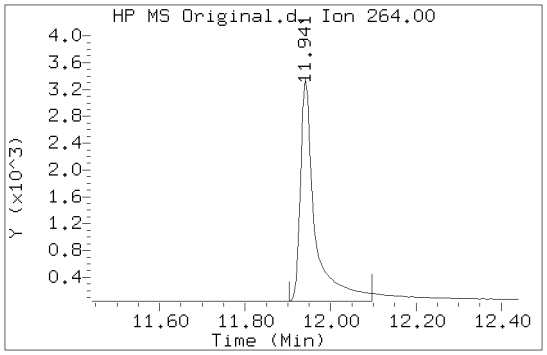
AFTER
MASS
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AREA
2695
HEIGHT
1458
29-Jun-2023
14:27
ALSHS
Ser



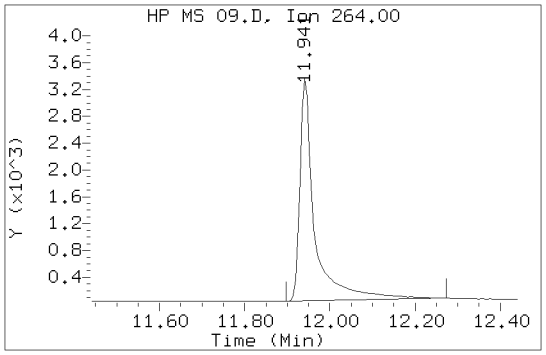
Perylene-d12 (1520-96-3)

Reason Code:

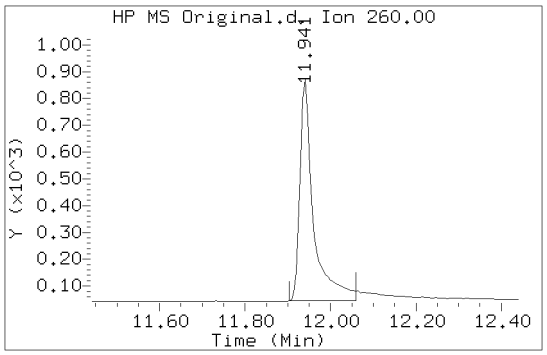
BEFORE
MASS
264
AREA
7735
HEIGHT
3310
16-Jun-2023
12:57
ALSHS
Server



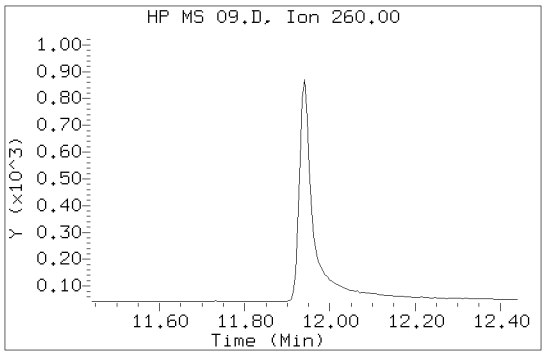
AFTER
MASS
264
AREA
7987
HEIGHT
3307
29-Jun-2023
14:27
ALSHS
Ser



BEFORE
MASS
260
AREA
1816
HEIGHT
824
16-Jun-2023
12:57
ALSHS
Server



AFTER
MASS
260
AREA
2012
HEIGHT
823
29-Jun-2023
14:27
ALSHS
Ser



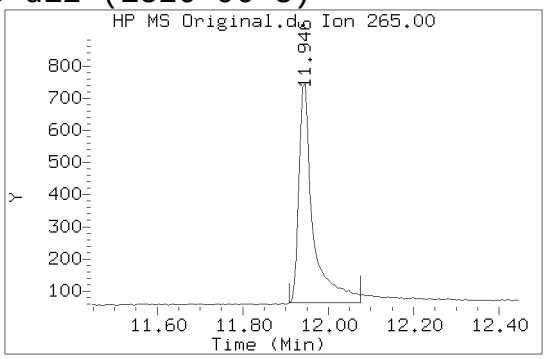
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Inj Date : 16-JUN-2023 12:38
InstruID : SV6.i
LabSampID : 14DXICAL-0.15

Perylene-d12 (1520-96-3)

Reason Code:

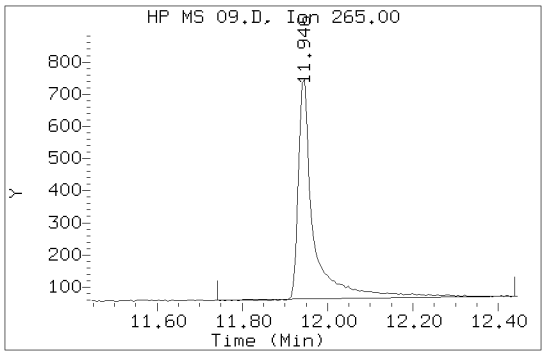
BEFORE

MASS
265
AREA
1571
HEIGHT
682
16-Jun-2023
12:57
ALSHS
Server



AFTER

MASS
265
AREA
1706
HEIGHT
682
29-Jun-2023
14:27
ALSHS
Ser

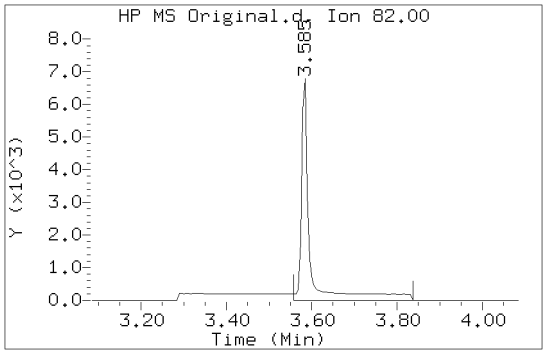


Nitrobenzene-d5 (4165-60-0)

Reason Code:

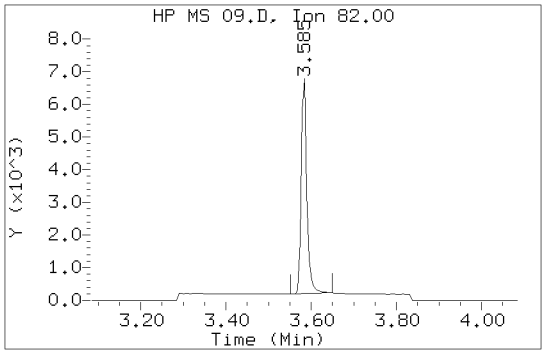
BEFORE

MASS
82
AREA
9487
HEIGHT
6787
16-Jun-2023
12:57
ALSHS
Server



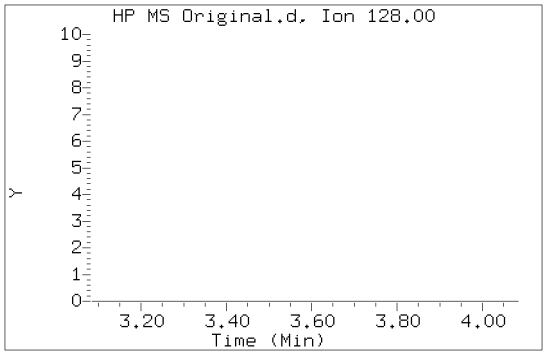
AFTER

MASS
82
AREA
6134
HEIGHT
6582
29-Jun-2023
14:27
ALSHS
Ser



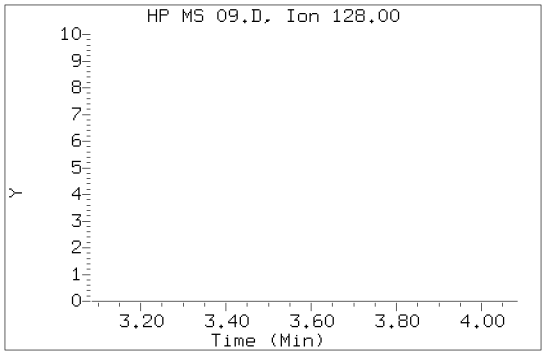
BEFORE

MASS
128
AREA
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HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



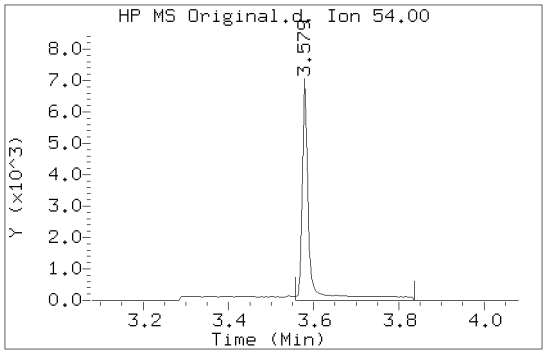
AFTER

MASS
128
AREA
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HEIGHT
0
29-Jun-2023
14:27
ALSHS
Ser



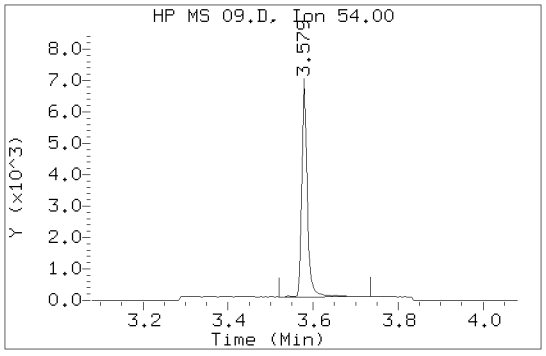
BEFORE

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AREA
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HEIGHT
7059
16-Jun-2023
12:57
ALSHS
Server



AFTER

MASS
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AREA
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HEIGHT
6945
29-Jun-2023
14:27
ALSHS
Ser

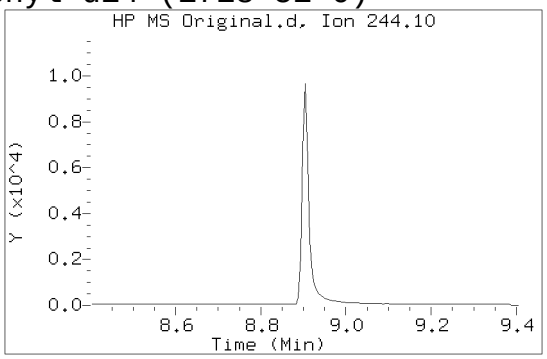


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Inj Date : 16-JUN-2023 12:38
InstruID : SV6.i
LabSampID : 14DXICAL-0.15

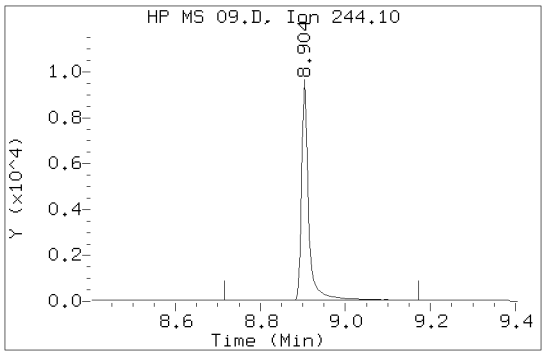
4-Terphenyl-d14 (1718-51-0)

Reason Code:

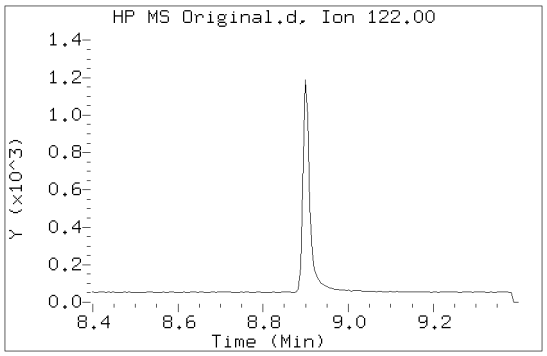
BEFORE
MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



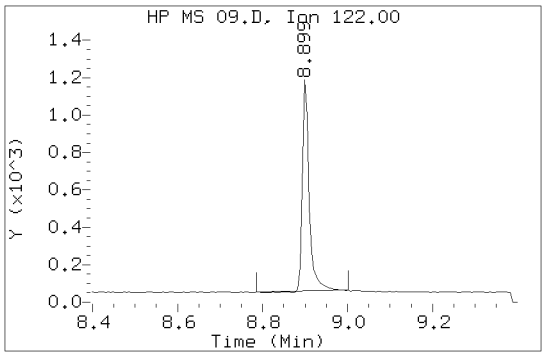
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MASS
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AREA
10881
HEIGHT
9614
29-Jun-2023
14:27
ALSHS
Ser



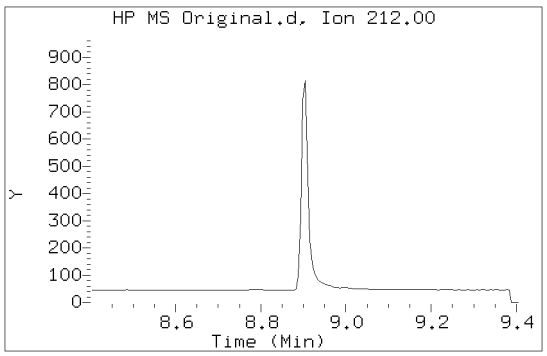
BEFORE
MASS
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AREA
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HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



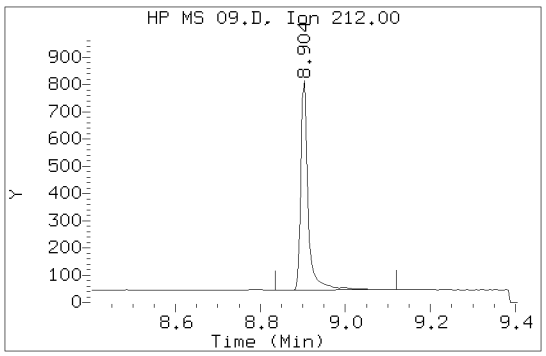
AFTER
MASS
122
AREA
1222
HEIGHT
1128
29-Jun-2023
14:27
ALSHS
Ser



BEFORE
MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
12:57
ALSHS
Server



AFTER
MASS
212
AREA
918
HEIGHT
769
29-Jun-2023
14:27
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D Page 1
Report Date: 29-Jun-2023 15:48

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Lab Smp Id: 14DXICAL-0.1 Client Smp ID: 14DXICAL-0.1
Inj Date : 16-JUN-2023 14:15
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.1
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 15:48 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 12 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.128	(1.000)	4026	0.10000	(aM)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	13383	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	4123	0.10000	0.1019(QM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	7945	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.248	5.248	(0.892)	7708	0.10000	0.09473(M)
* 126 Phenanthrene-d10	188	7.328	7.328	(1.000)	15519	0.10000	(M)
* 182 Chrysene-d12	240	10.028	10.028	(1.000)	9988	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.909	8.909	(0.888)	7529	0.10000	0.1033(M)
* 198 Perylene-d12	264	11.946	11.946	(1.000)	8963	0.10000	(M)
1 1,4-Dioxane	58	1.471	1.471	(0.470)	1445	0.10000	0.1066(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248638

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D

Date : 16-JUN-2023 14:15

Client ID: 14DXICAL-0.1

Instrument: SV6.i

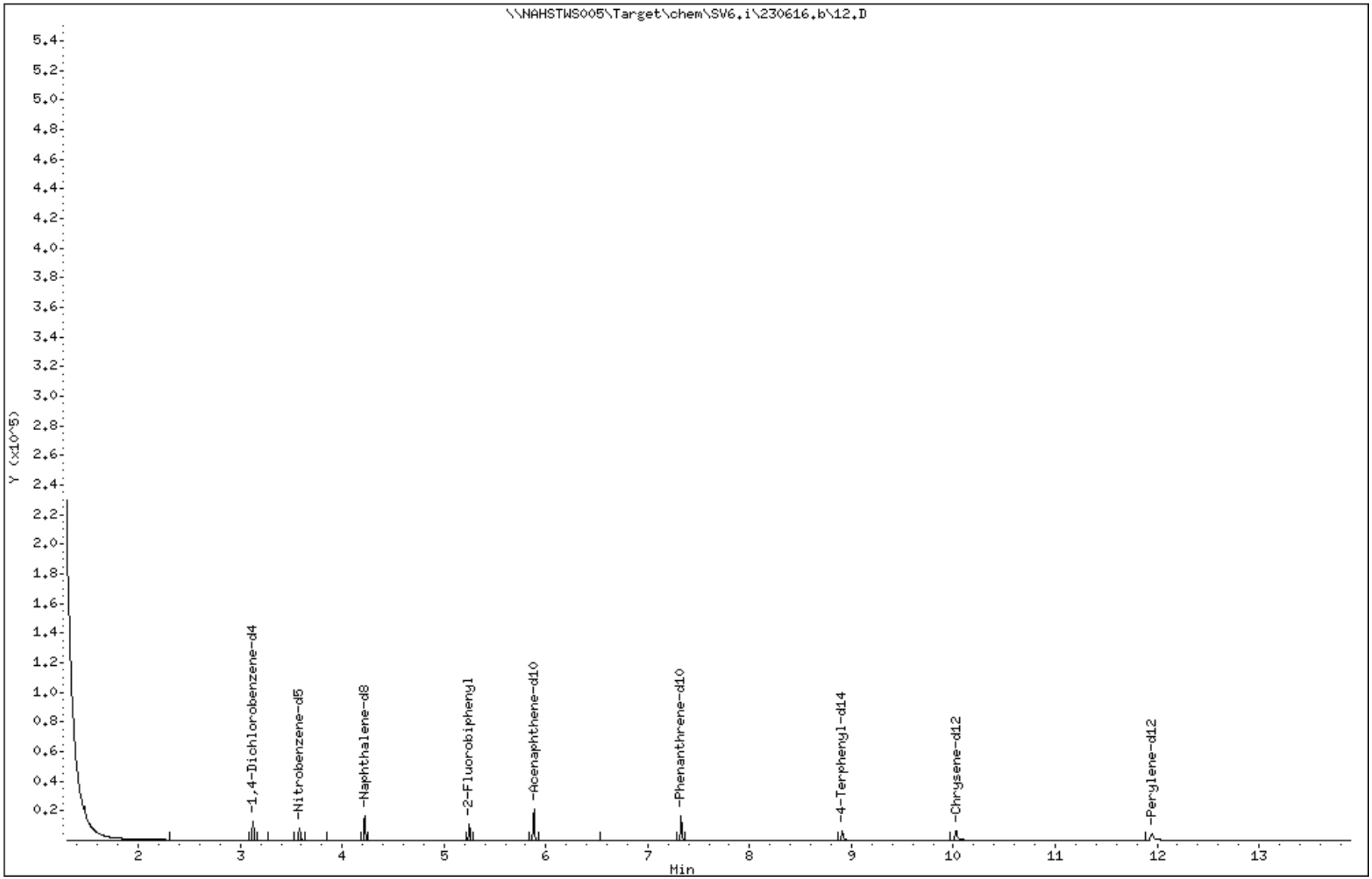
Sample Info: 14DXICAL-0.1

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28

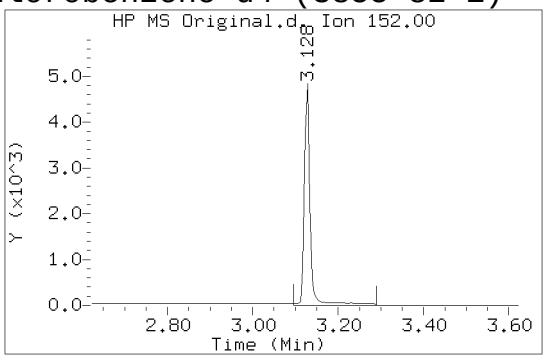


Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

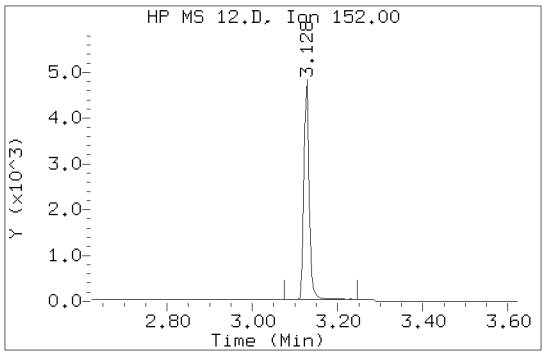
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

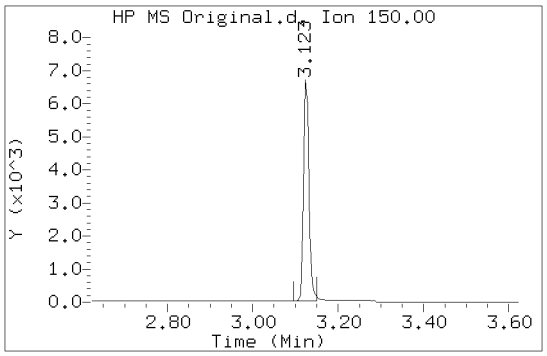
BEFORE
MASS
152
AREA
4570
HEIGHT
4842
16-Jun-2023
14:59
jiayi
lu



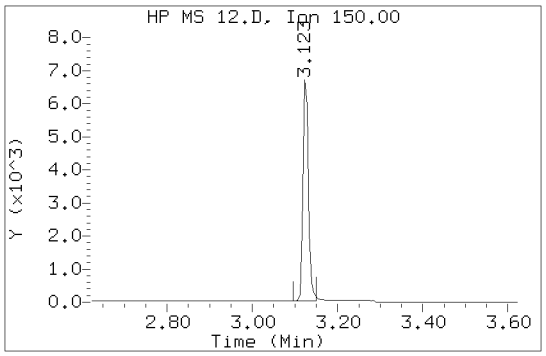
AFTER
MASS
152
AREA
4026
HEIGHT
4796
29-Jun-2023
15:48



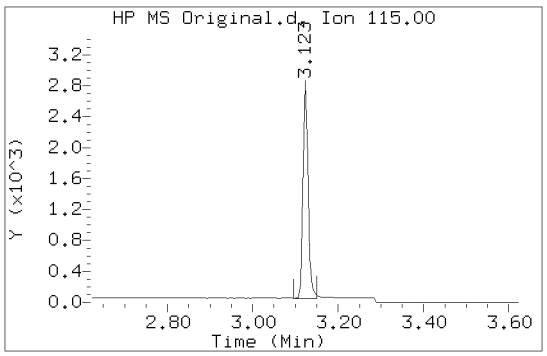
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MASS
150
AREA
5752
HEIGHT
6676
16-Jun-2023
14:59
jiayi
lu



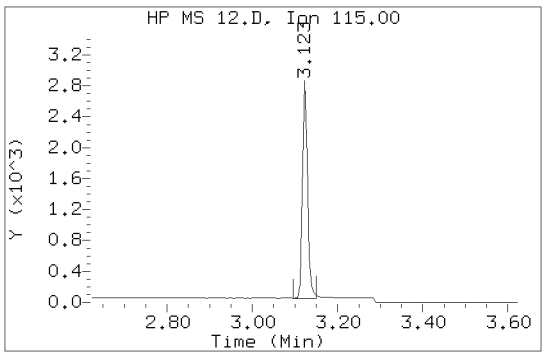
AFTER
MASS
150
AREA
5752
HEIGHT
6676
29-Jun-2023
15:48



BEFORE
MASS
115
AREA
2249
HEIGHT
2814
16-Jun-2023
14:59
jiayi
lu



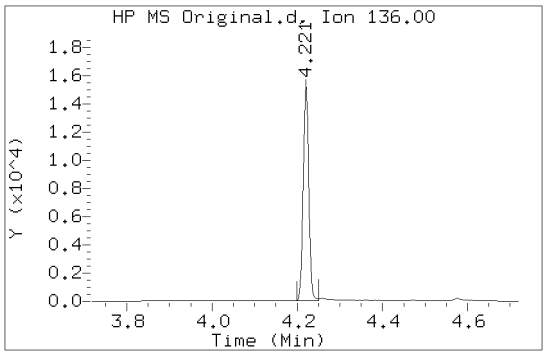
AFTER
MASS
115
AREA
2249
HEIGHT
2814
29-Jun-2023
15:48



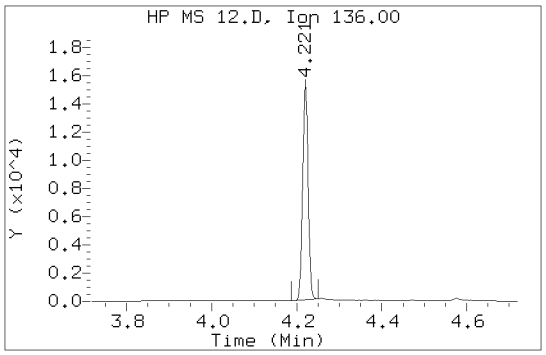
Naphthalene-d8 (1146-65-2)

Reason Code:

BEFORE
MASS
136
AREA
13619
HEIGHT
15676
16-Jun-2023
14:59
jiayi
lu



AFTER
MASS
136
AREA
13383
HEIGHT
15614
29-Jun-2023
15:48

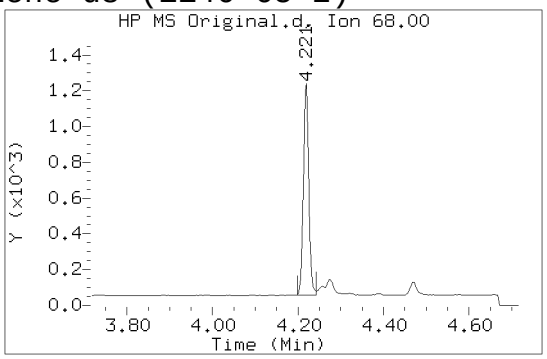


Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

Naphthalene-d8 (1146-65-2)

BEFORE

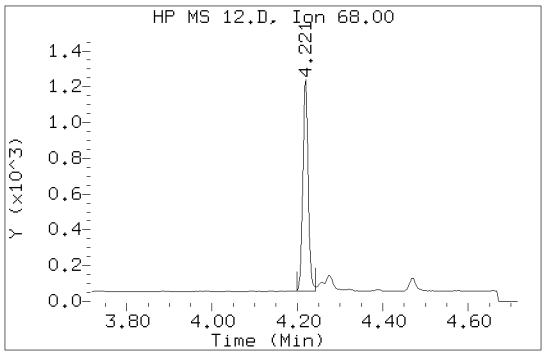
MASS
68
AREA
1062
HEIGHT
1182
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
68
AREA
1062
HEIGHT
1182
29-Jun-2023
15:48

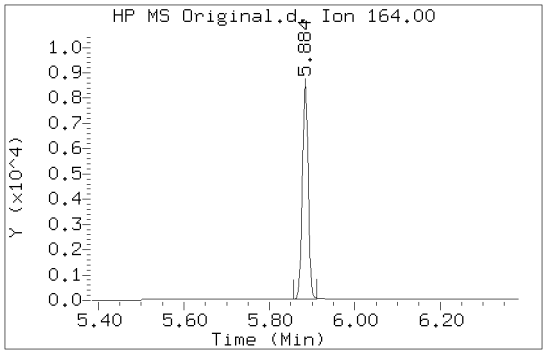
Reason Code:



Acenaphthene-d10 (15067-26-2)

BEFORE

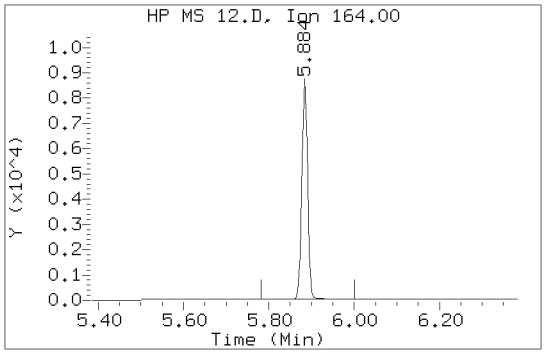
MASS
164
AREA
7893
HEIGHT
8717
16-Jun-2023
14:59
jiayi
lu



AFTER

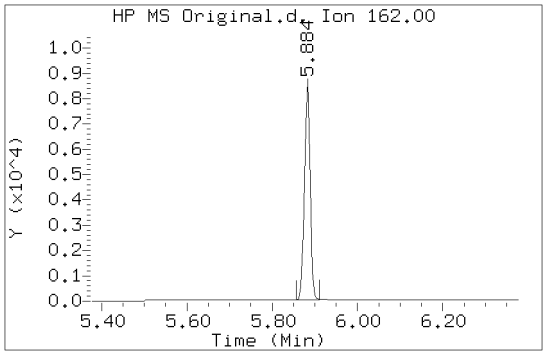
MASS
164
AREA
7945
HEIGHT
8719
29-Jun-2023
15:48

Reason Code:



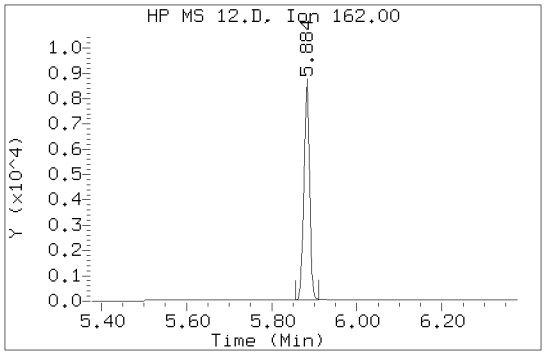
BEFORE

MASS
162
AREA
7978
HEIGHT
8729
16-Jun-2023
14:59
jiayi
lu



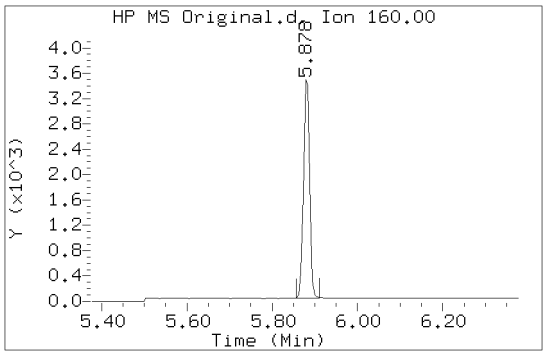
AFTER

MASS
162
AREA
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HEIGHT
8729
29-Jun-2023
15:48



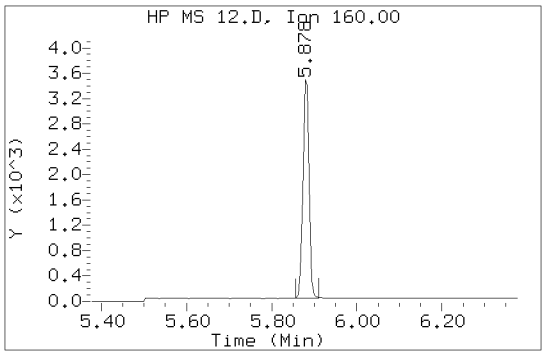
BEFORE

MASS
160
AREA
3420
HEIGHT
3449
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
160
AREA
3420
HEIGHT
3449
29-Jun-2023
15:48

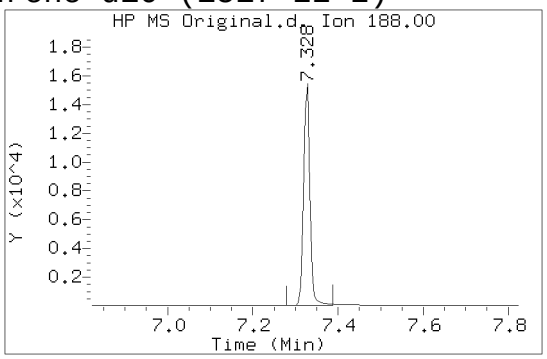


Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

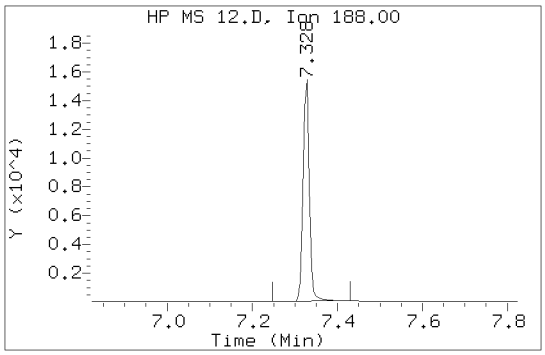
Phenanthrene-d10 (1517-22-2)

Reason Code:

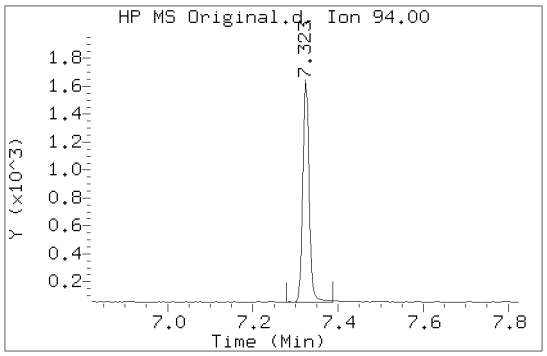
BEFORE
MASS
188
AREA
15580
HEIGHT
15412
16-Jun-2023
14:59
jiayi
lu



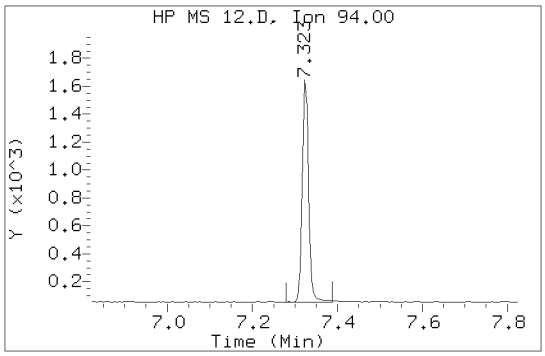
AFTER
MASS
188
AREA
15519
HEIGHT
15398
29-Jun-2023
15:48



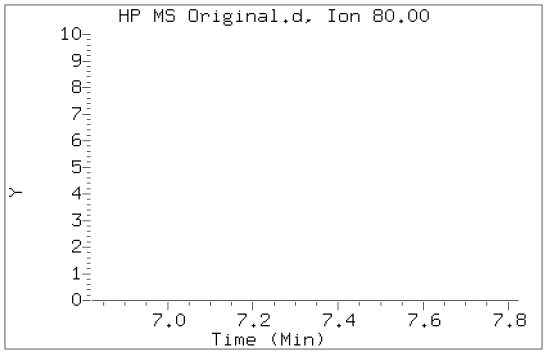
BEFORE
MASS
94
AREA
1615
HEIGHT
1589
16-Jun-2023
14:59
jiayi
lu



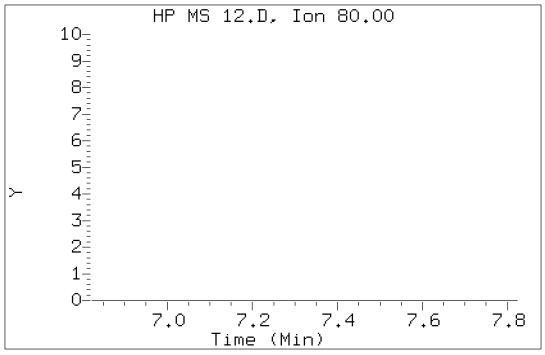
AFTER
MASS
94
AREA
1615
HEIGHT
1589
29-Jun-2023
15:48



BEFORE
MASS
80
AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



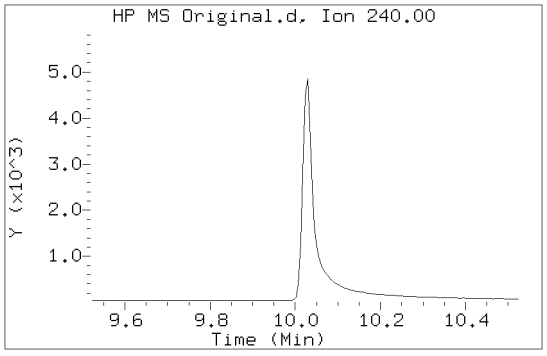
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HEIGHT
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29-Jun-2023
15:48



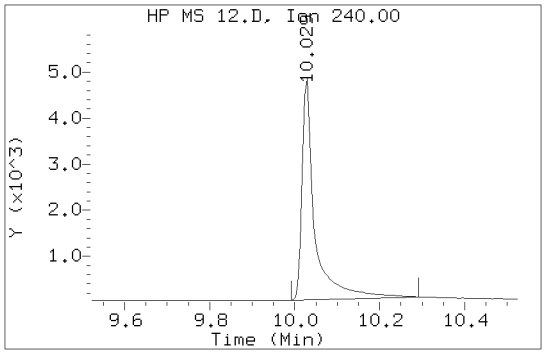
Chrysene-d12 (1719-03-5)

Reason Code:

BEFORE
MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



AFTER
MASS
240
AREA
9988
HEIGHT
4801
29-Jun-2023
15:48

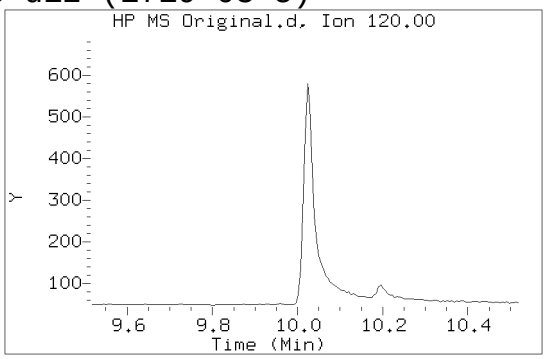


Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

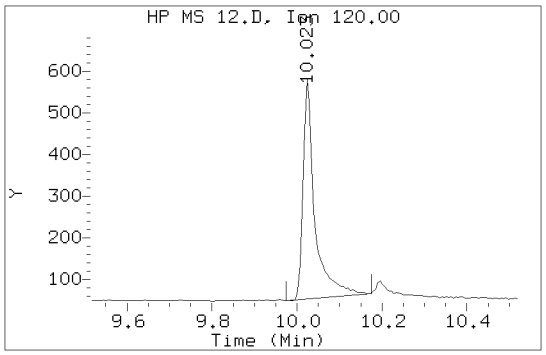
Chrysene-d12 (1719-03-5)

Reason Code:

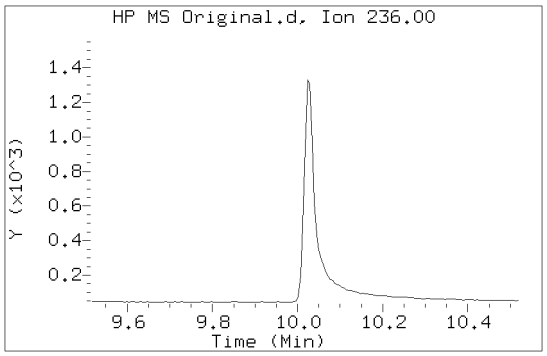
BEFORE
MASS
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AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



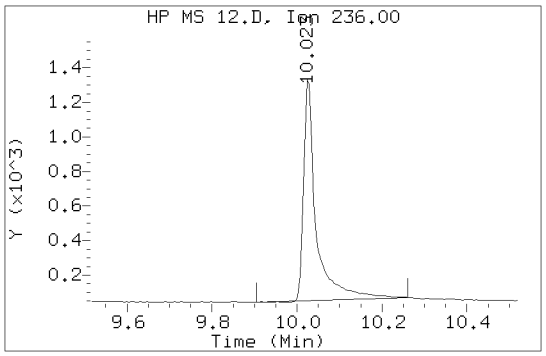
AFTER
MASS
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AREA
998
HEIGHT
525
29-Jun-2023
15:48



BEFORE
MASS
236
AREA
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HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



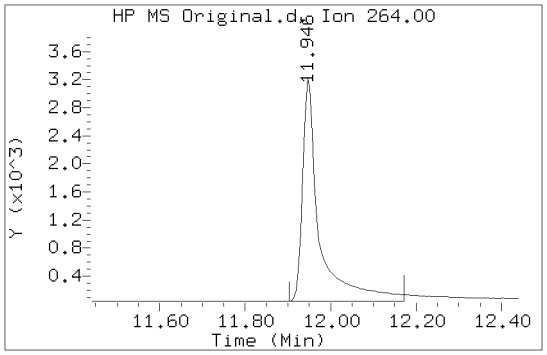
AFTER
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AREA
2622
HEIGHT
1277
29-Jun-2023
15:48



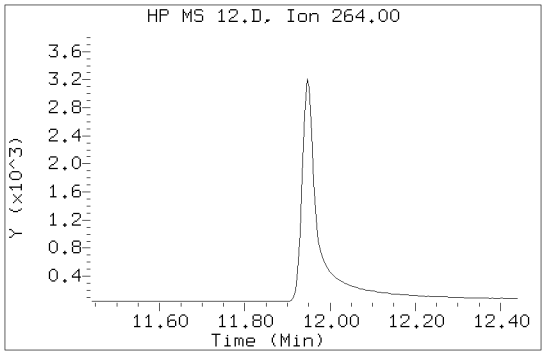
Perylene-d12 (1520-96-3)

Reason Code:

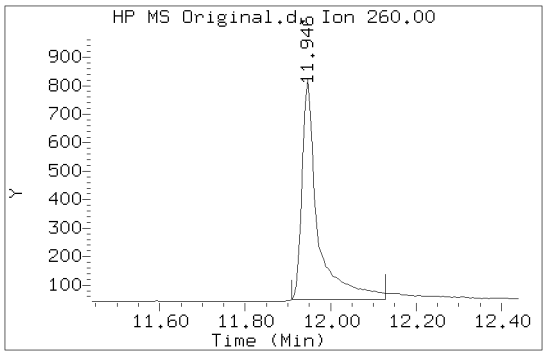
BEFORE
MASS
264
AREA
8613
HEIGHT
3164
16-Jun-2023
14:59
jiayi
lu



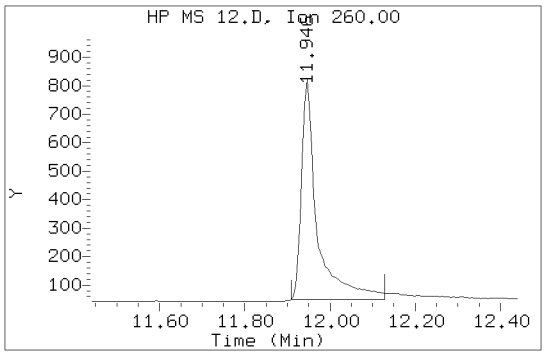
AFTER
MASS
264
AREA
8963
HEIGHT
3161
29-Jun-2023
15:48



BEFORE
MASS
260
AREA
1977
HEIGHT
772
16-Jun-2023
14:59
jiayi
lu



AFTER
MASS
260
AREA
1977
HEIGHT
772
29-Jun-2023
15:48



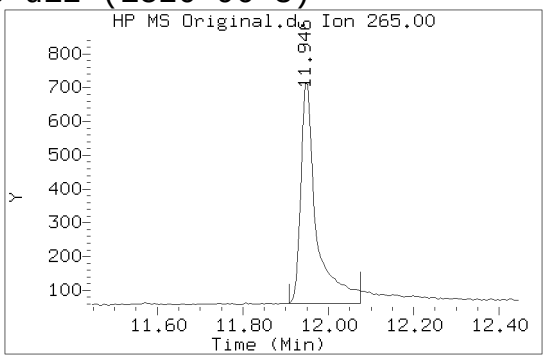
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

Perylene-d12 (1520-96-3)

Reason Code:

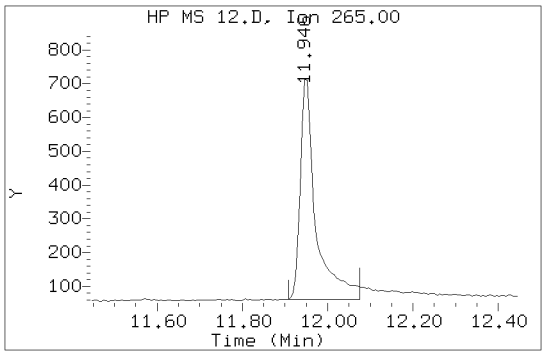
BEFORE

MASS
265
AREA
1666
HEIGHT
651
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
265
AREA
1666
HEIGHT
651
29-Jun-2023
15:48

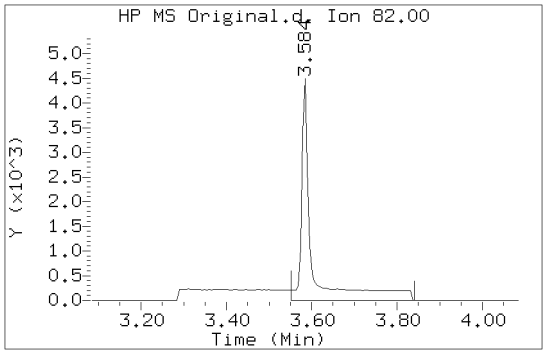


Nitrobenzene-d5 (4165-60-0)

Reason Code:

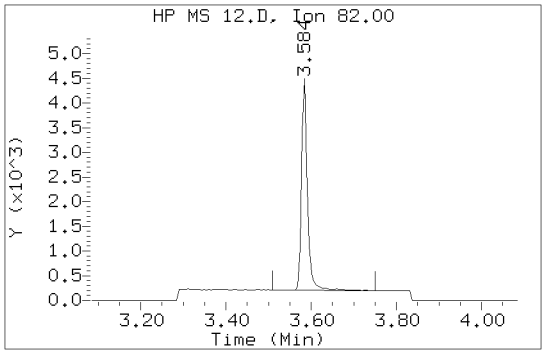
BEFORE

MASS
82
AREA
7524
HEIGHT
4492
16-Jun-2023
14:59
jiayi
lu



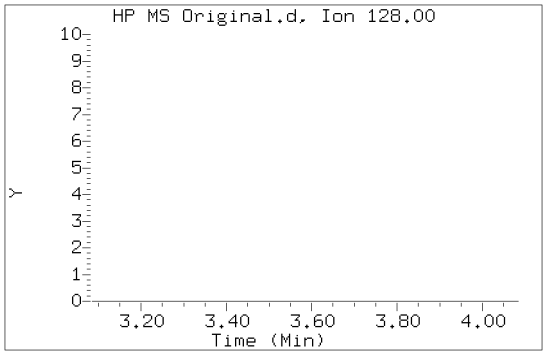
AFTER

MASS
82
AREA
4123
HEIGHT
4285
29-Jun-2023
15:48



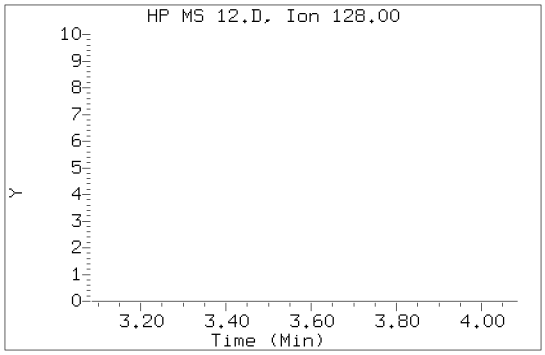
BEFORE

MASS
128
AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



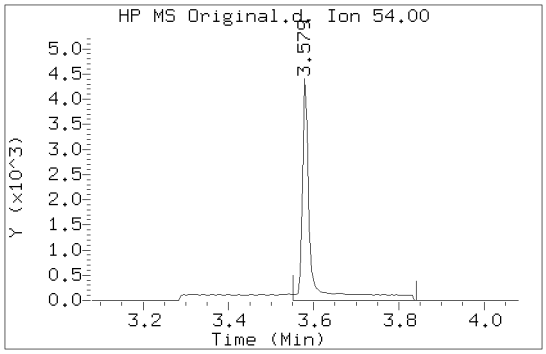
AFTER

MASS
128
AREA
0
HEIGHT
0
29-Jun-2023
15:48



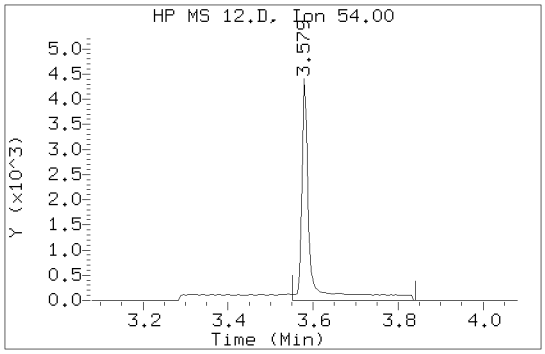
BEFORE

MASS
54
AREA
6015
HEIGHT
4407
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
54
AREA
6015
HEIGHT
4407
29-Jun-2023
15:48



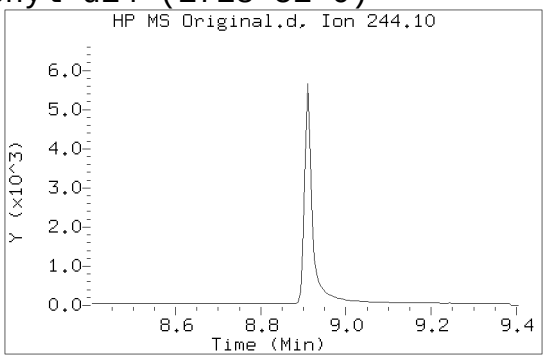
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

4-Terphenyl-d14 (1718-51-0)

Reason Code:

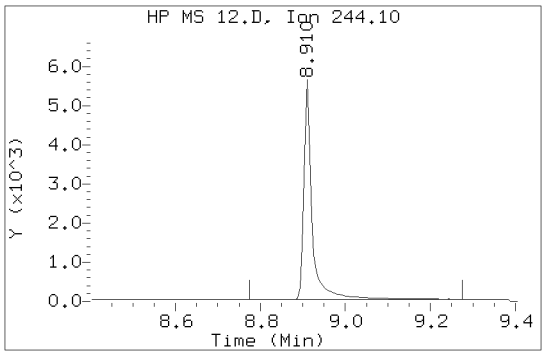
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



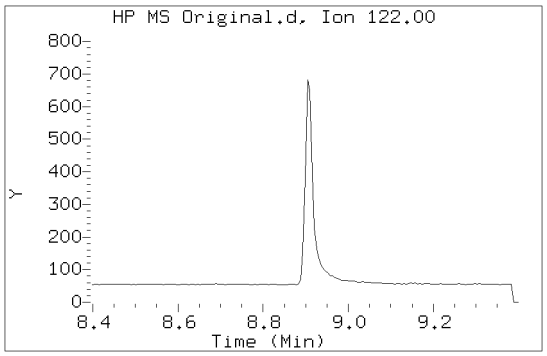
AFTER

MASS
244.1
AREA
7529
HEIGHT
5616
29-Jun-2023
15:48



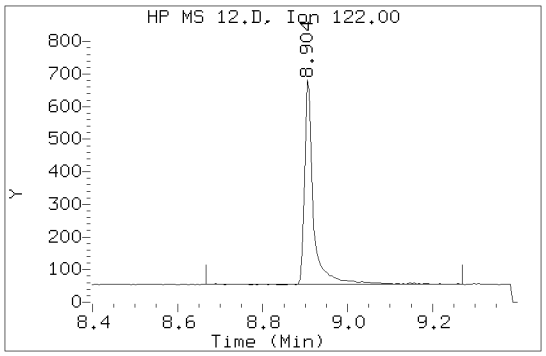
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



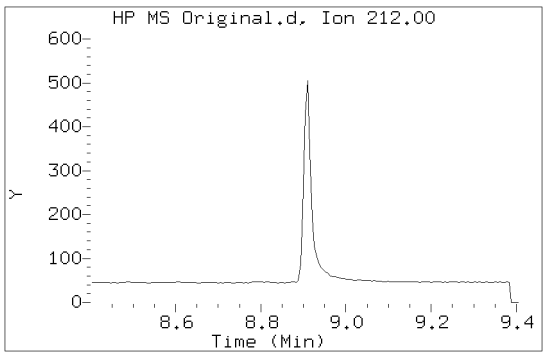
AFTER

MASS
122
AREA
918
HEIGHT
627
29-Jun-2023
15:48



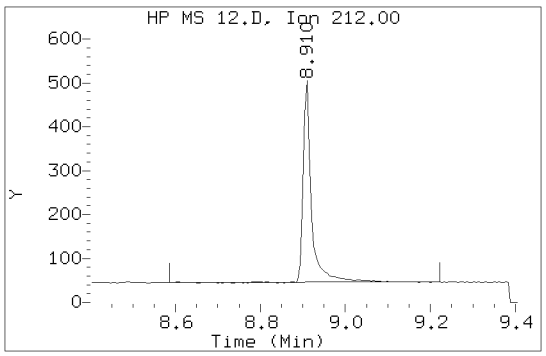
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
212
AREA
625
HEIGHT
459
29-Jun-2023
15:48

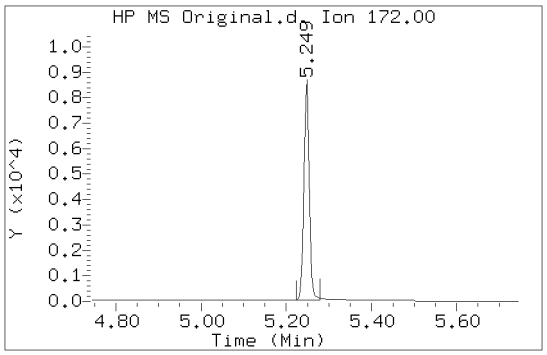


2-Fluorobiphenyl (321-60-8)

Reason Code:

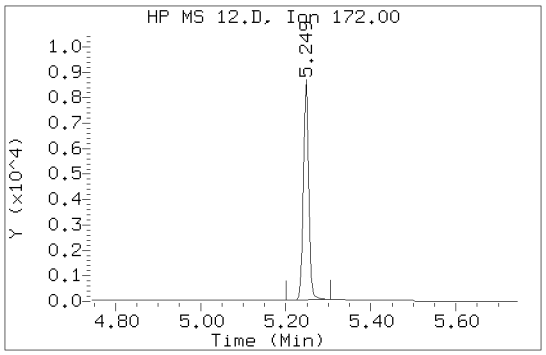
BEFORE

MASS
172
AREA
7733
HEIGHT
8663
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
172
AREA
7708
HEIGHT
8650
29-Jun-2023
15:48



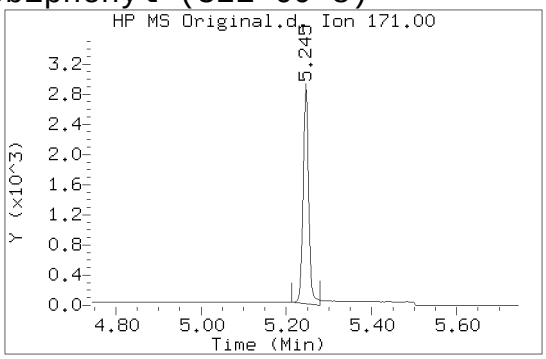
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\12.D
Inj Date : 16-JUN-2023 14:15
InstruID : SV6.i
LabSampID : 14DXICAL-0.1

2-Fluorobiphenyl (321-60-8)

Reason Code:

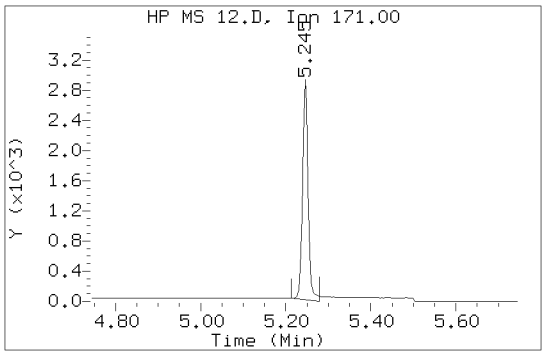
BEFORE

MASS
171
AREA
2685
HEIGHT
2917
16-Jun-2023
14:59
jiayi
lu



AFTER

MASS
171
AREA
2685
HEIGHT
2917
29-Jun-2023
15:48



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Lab Smp Id: 14DXICAL-0.5 Client Smp ID: 14DXICAL-0.5
Inj Date : 16-JUN-2023 14:51
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.5
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 12:38 Cal File: 09.D
Als bottle: 14 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.122	3.122	(1.000)	4165	0.10000	(aM)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	13989	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.579	3.579	(0.848)	19311	0.50000	0.4566(AM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	8414	0.10000	
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	39708	0.50000	0.4608(AM)
* 126 Phenanthrene-d10	188	7.322	7.322	(1.000)	16472	0.10000	(M)
* 182 Chrysene-d12	240	10.017	10.017	(1.000)	10483	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.904	8.904	(0.889)	39805	0.50000	0.5203(AM)
* 198 Perylene-d12	264	11.940	11.940	(1.000)	8460	0.10000	(M)
1 1,4-Dioxane	58	1.452	1.452	(0.465)	6496	0.50000	0.4630(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01248648

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D

Date : 16-JUN-2023 14:51

Client ID: 14DXICAL-0.5

Instrument: SV6.i

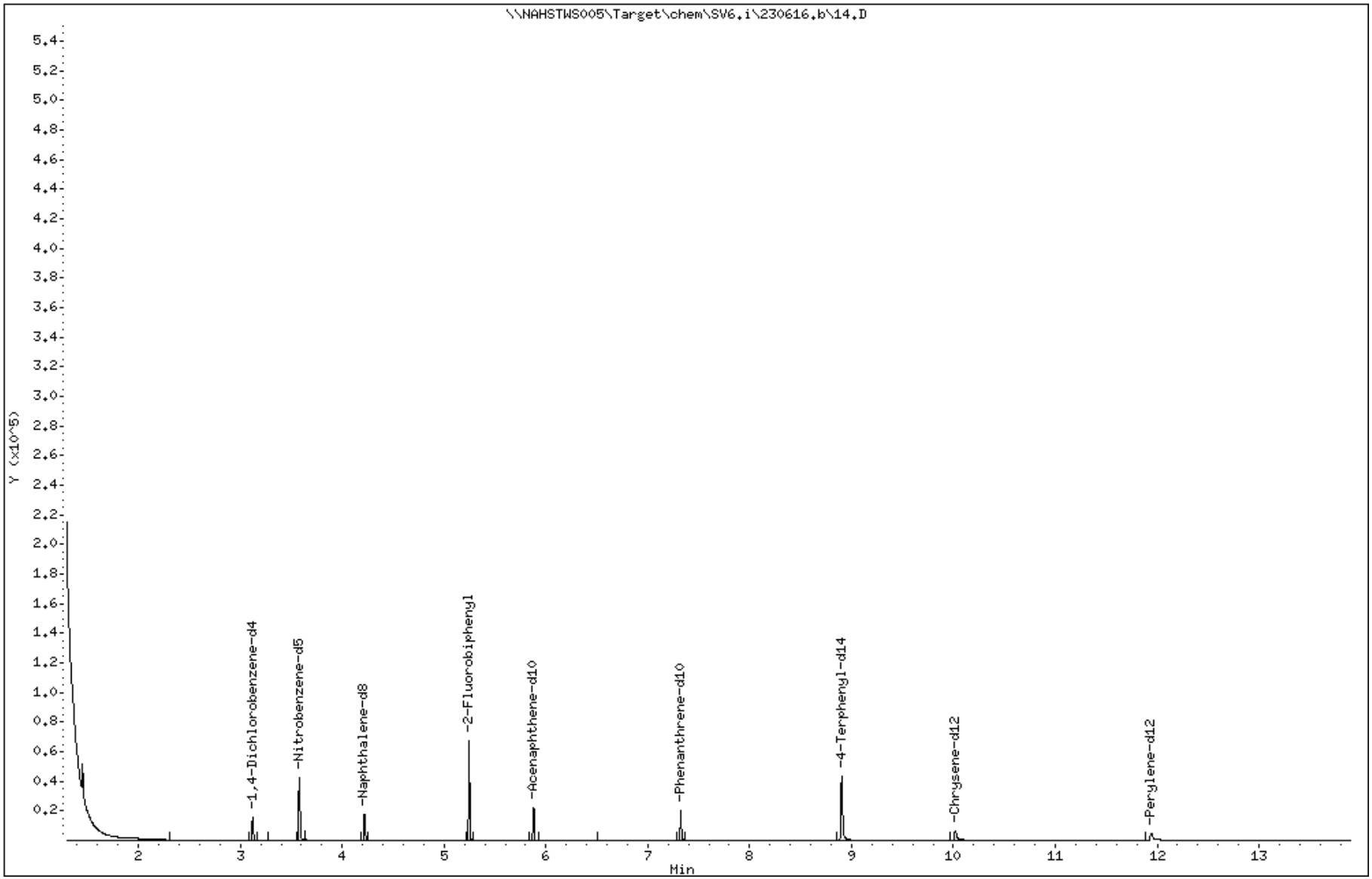
Sample Info: 14DXICAL-0.5

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



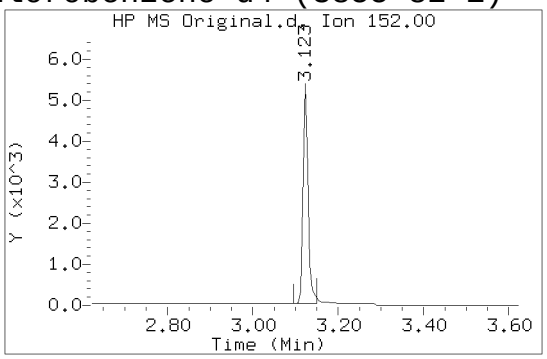
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Inj Date : 16-JUN-2023 14:51
InstruID : SV6.i
LabSampID : 14DXICAL-0.5

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

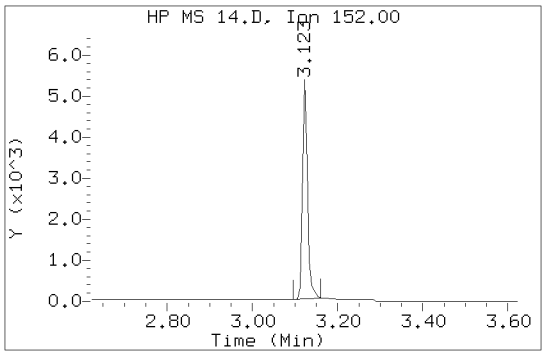
BEFORE

MASS
152
AREA
4211
HEIGHT
5358
16-Jun-2023
15:06
ALSHS
Server



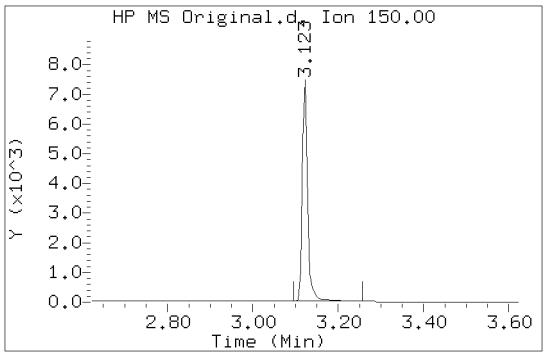
AFTER

MASS
152
AREA
4165
HEIGHT
5341
29-Jun-2023
14:27
ALSHS
Ser



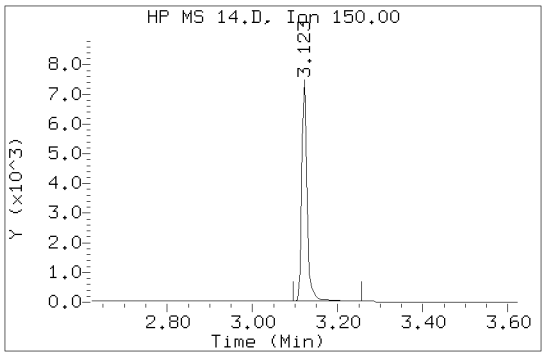
BEFORE

MASS
150
AREA
6228
HEIGHT
7441
16-Jun-2023
15:06
ALSHS
Server



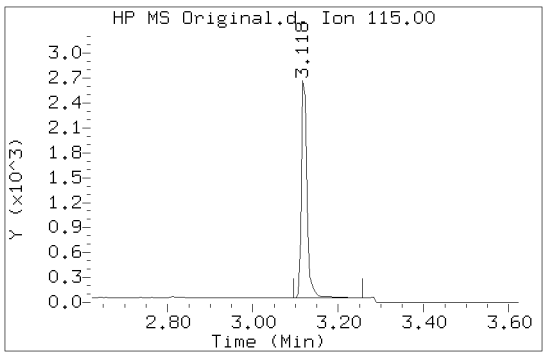
AFTER

MASS
150
AREA
6228
HEIGHT
7441
29-Jun-2023
14:27
ALSHS
Ser



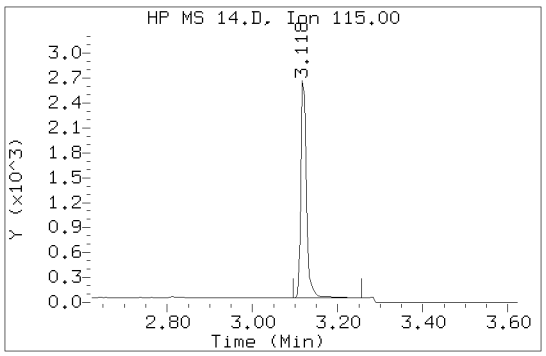
BEFORE

MASS
115
AREA
2367
HEIGHT
2615
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
115
AREA
2367
HEIGHT
2615
29-Jun-2023
14:27
ALSHS
Ser

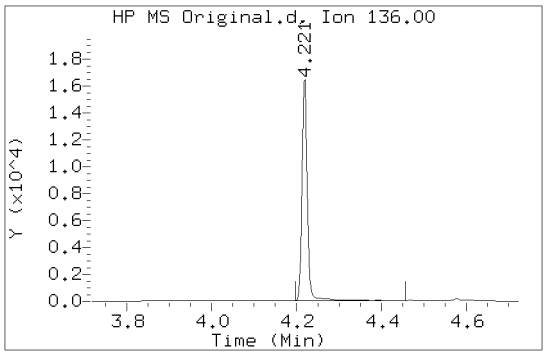


Naphthalene-d8 (1146-65-2)

Reason Code:

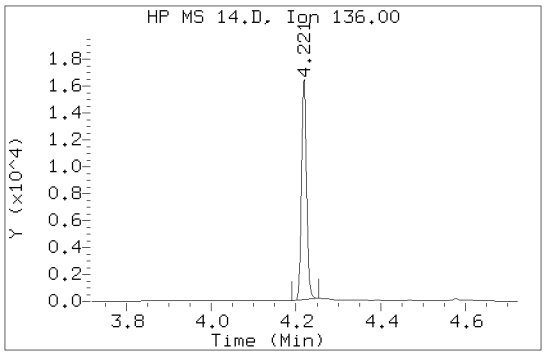
BEFORE

MASS
136
AREA
14856
HEIGHT
16448
16-Jun-2023
15:06
ALSHS
Server



AFTER

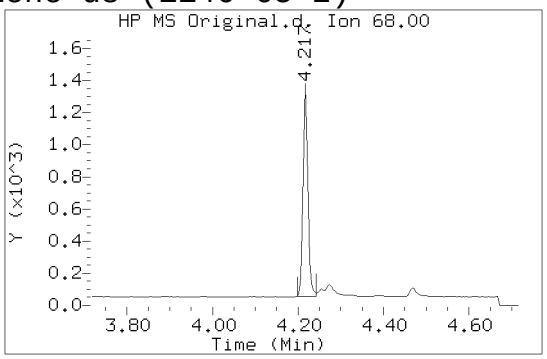
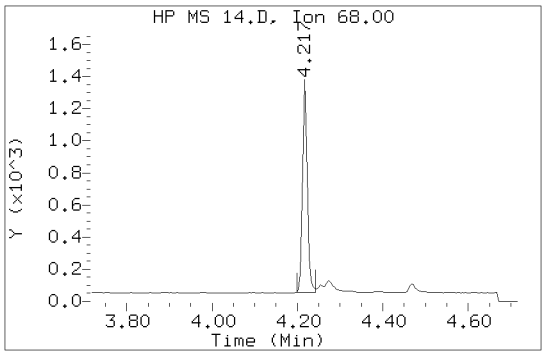
MASS
136
AREA
13989
HEIGHT
16349
29-Jun-2023
14:27
ALSHS
Ser



Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Inj Date : 16-JUN-2023 14:51
InstruID : SV6.i
LabSampID : 14DXICAL-0.5

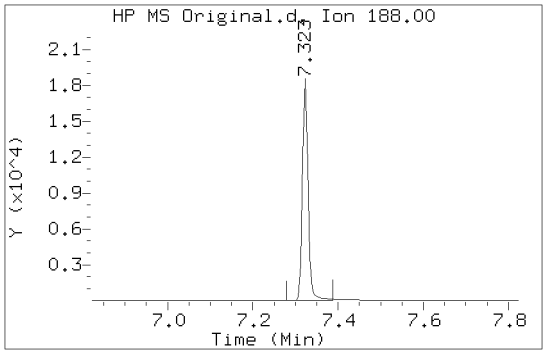
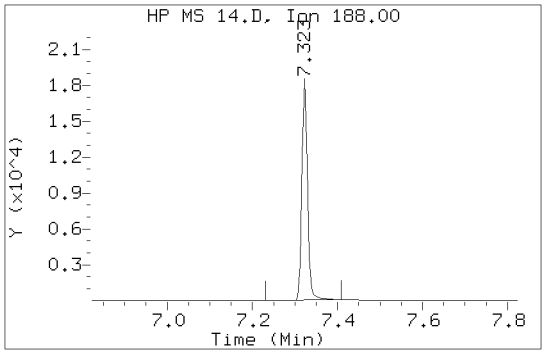
Naphthalene-d8 (1146-65-2)

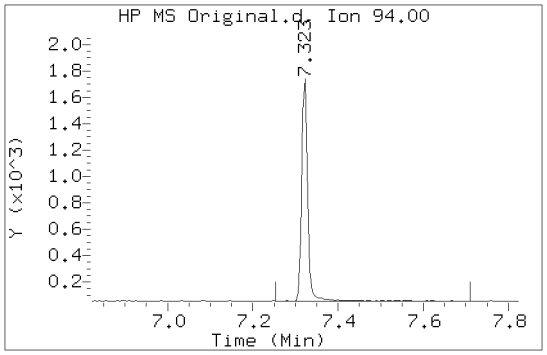
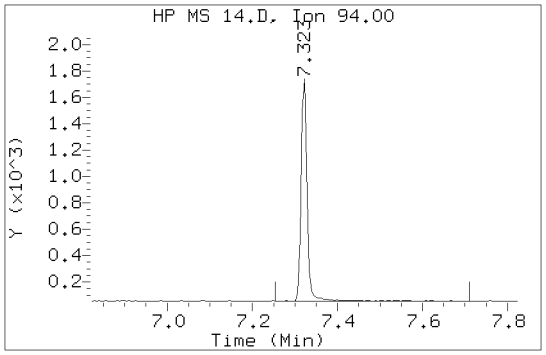
Reason Code:

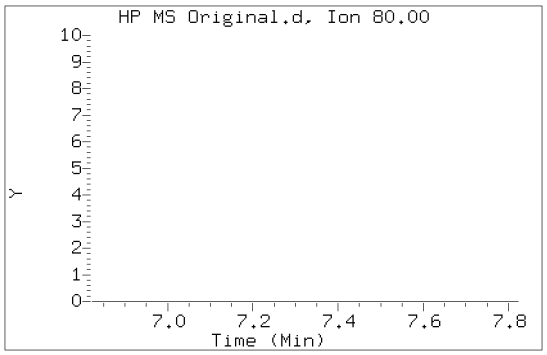
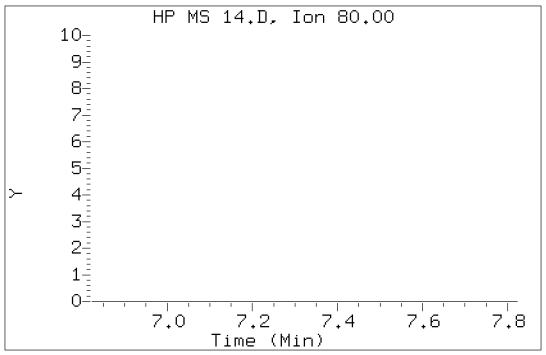
BEFORE		AFTER	
MASS		MASS	
68		68	
AREA		AREA	
1074		1074	
HEIGHT		HEIGHT	
1326		1326	
16-Jun-2023		29-Jun-2023	
15:06		14:27	
ALSHS		ALSHS	
Server		Ser	

Phenanthrene-d10 (1517-22-2)

Reason Code:

BEFORE		AFTER	
MASS		MASS	
188		188	
AREA		AREA	
16664		16472	
HEIGHT		HEIGHT	
18523		18498	
16-Jun-2023		29-Jun-2023	
15:06		14:27	
ALSHS		ALSHS	
Server		Ser	

BEFORE		AFTER	
MASS		MASS	
94		94	
AREA		AREA	
1634		1634	
HEIGHT		HEIGHT	
1685		1685	
16-Jun-2023		29-Jun-2023	
15:06		14:27	
ALSHS		ALSHS	
Server		Ser	

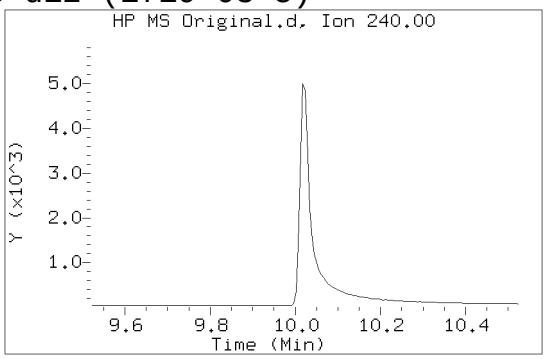
BEFORE		AFTER	
MASS		MASS	
80		80	
AREA		AREA	
0		0	
HEIGHT		HEIGHT	
0		0	
16-Jun-2023		29-Jun-2023	
15:06		14:27	
ALSHS		ALSHS	
Server		Ser	

Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Inj Date : 16-JUN-2023 14:51
InstruID : SV6.i
LabSampID : 14DXICAL-0.5

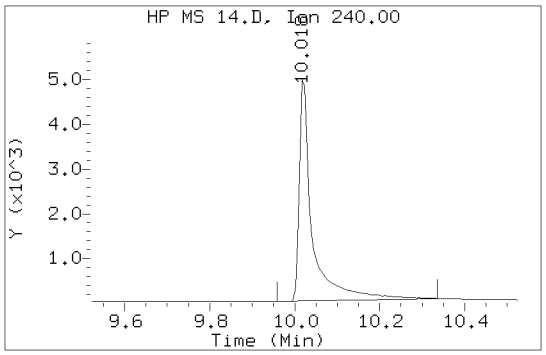
Chrysene-d12 (1719-03-5)

Reason Code:

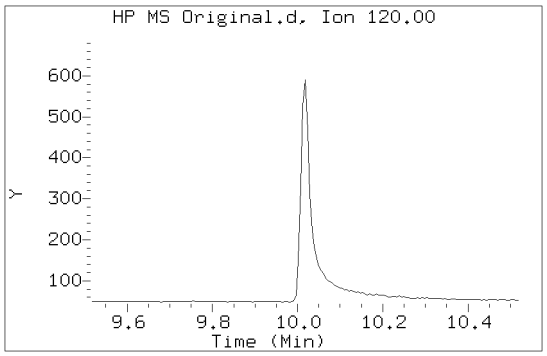
BEFORE
MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



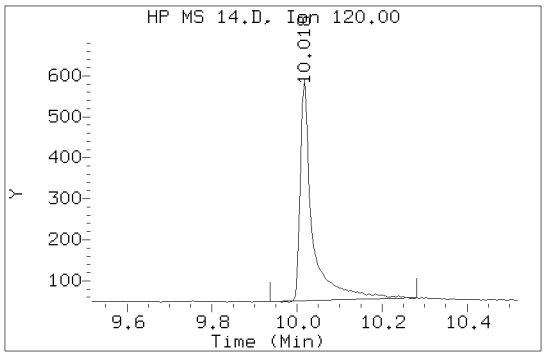
AFTER
MASS
240
AREA
10483
HEIGHT
4943
29-Jun-2023
14:27
ALSHS
Ser



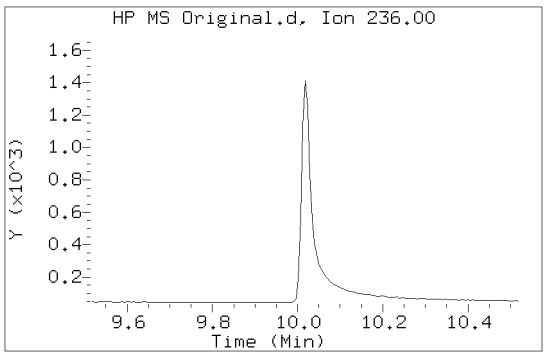
BEFORE
MASS
120
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



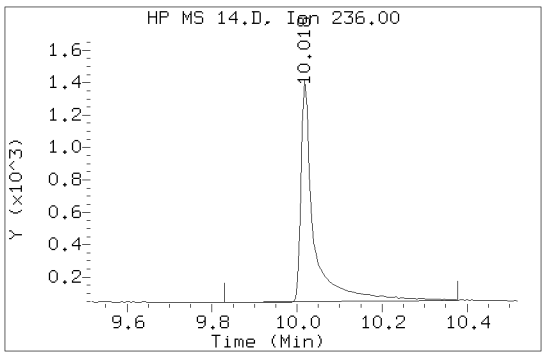
AFTER
MASS
120
AREA
1068
HEIGHT
538
29-Jun-2023
14:27
ALSHS
Ser



BEFORE
MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



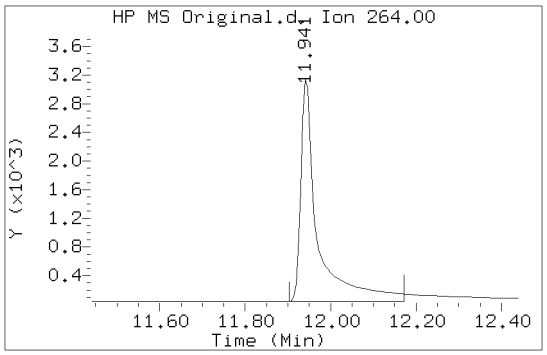
AFTER
MASS
236
AREA
2872
HEIGHT
1362
29-Jun-2023
14:27
ALSHS
Ser



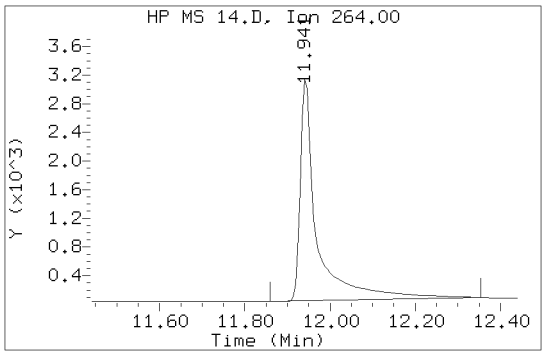
Perylene-d12 (1520-96-3)

Reason Code:

BEFORE
MASS
264
AREA
8406
HEIGHT
3088
16-Jun-2023
15:06
ALSHS
Server



AFTER
MASS
264
AREA
8460
HEIGHT
3081
29-Jun-2023
14:27
ALSHS
Ser



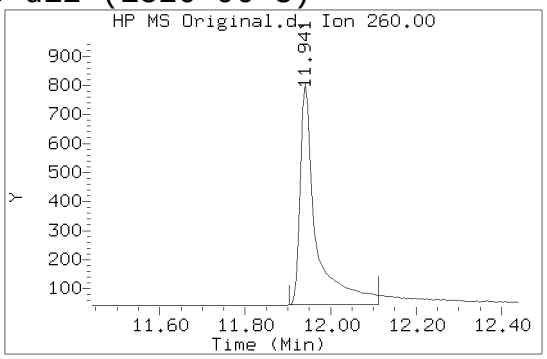
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Inj Date : 16-JUN-2023 14:51
InstruID : SV6.i
LabSampID : 14DXICAL-0.5

Perylene-d12 (1520-96-3)

Reason Code:

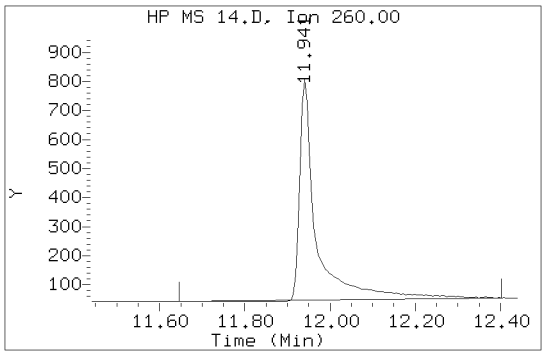
BEFORE

MASS
260
AREA
1950
HEIGHT
761
16-Jun-2023
15:06
ALSHS
Server



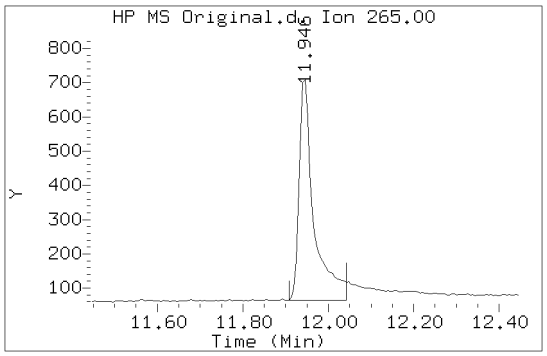
AFTER

MASS
260
AREA
2034
HEIGHT
757
29-Jun-2023
14:27
ALSHS
Ser



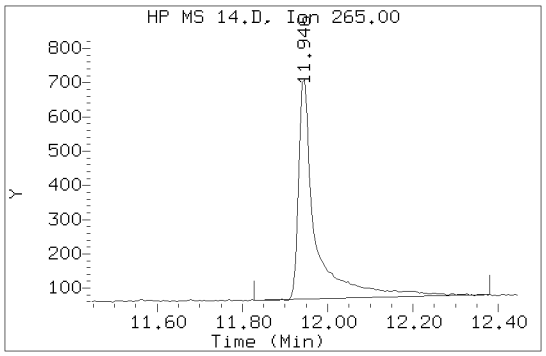
BEFORE

MASS
265
AREA
1539
HEIGHT
643
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
265
AREA
1765
HEIGHT
639
29-Jun-2023
14:27
ALSHS
Ser

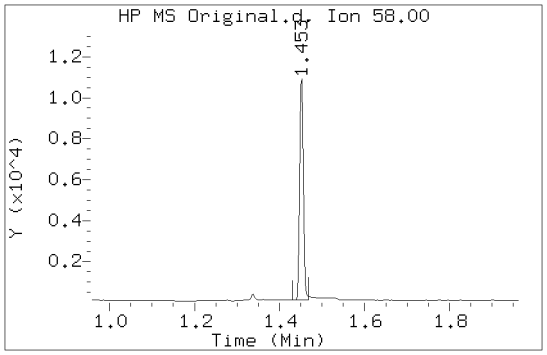


1,4-Dioxane ()

Reason Code:

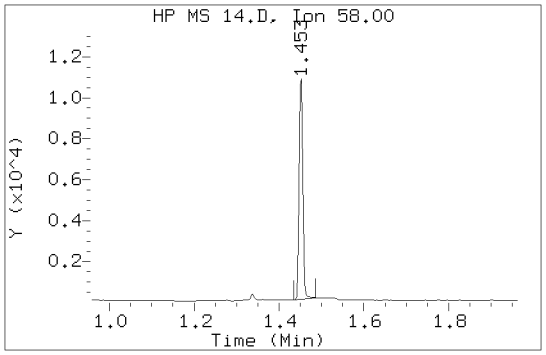
BEFORE

MASS
58
AREA
6535
HEIGHT
10789
16-Jun-2023
15:06
ALSHS
Server



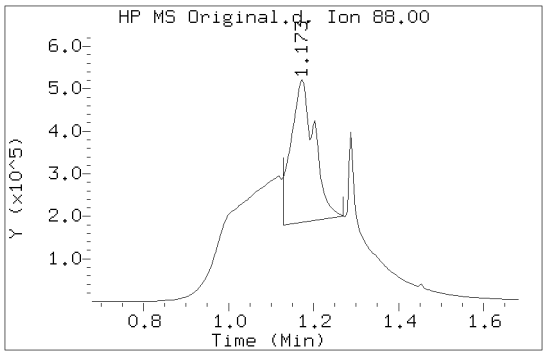
AFTER

MASS
58
AREA
6496
HEIGHT
10751
29-Jun-2023
14:27
ALSHS
Ser



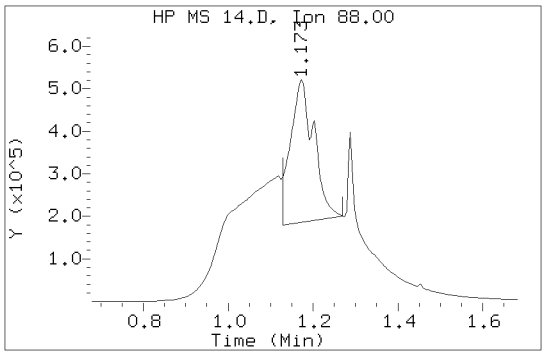
BEFORE

MASS
88
AREA
1285756
HEIGHT
334955
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
88
AREA
1285756
HEIGHT
334955
29-Jun-2023
14:27
ALSHS
Ser



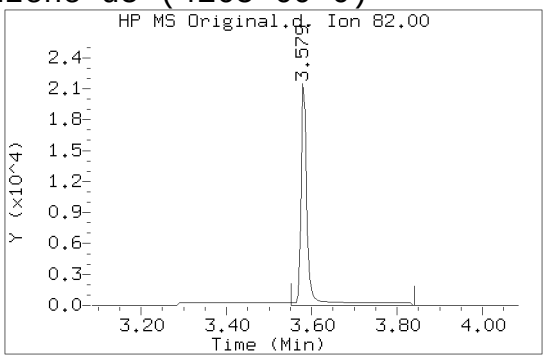
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Inj Date : 16-JUN-2023 14:51
InstruID : SV6.i
LabSampID : 14DXICAL-0.5

Nitrobenzene-d5 (4165-60-0)

Reason Code:

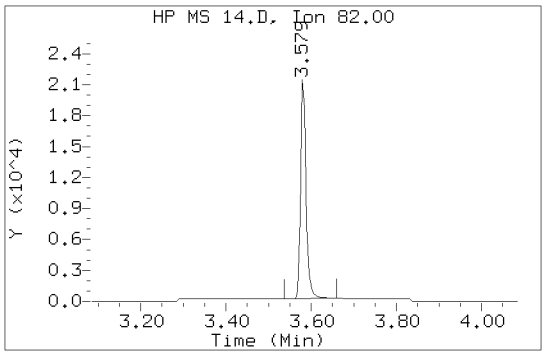
BEFORE

MASS
82
AREA
23560
HEIGHT
21488
16-Jun-2023
15:06
ALSHS
Server



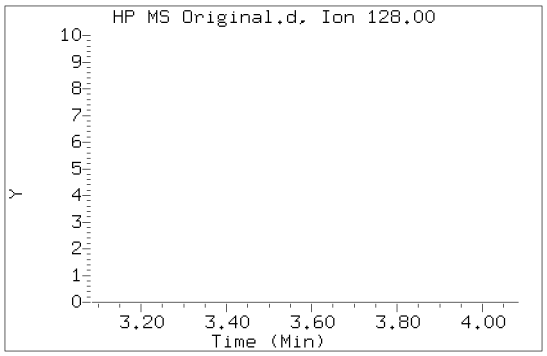
AFTER

MASS
82
AREA
19311
HEIGHT
21230
29-Jun-2023
14:27
ALSHS
Ser



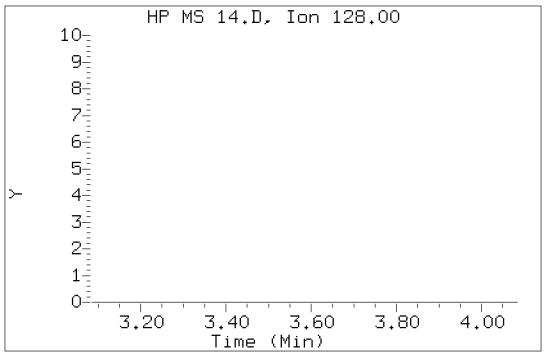
BEFORE

MASS
128
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



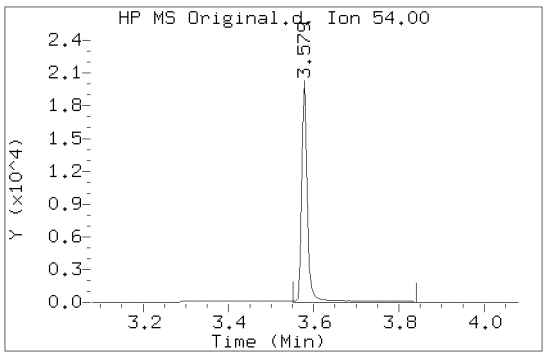
AFTER

MASS
128
AREA
0
HEIGHT
0
29-Jun-2023
14:27
ALSHS
Ser



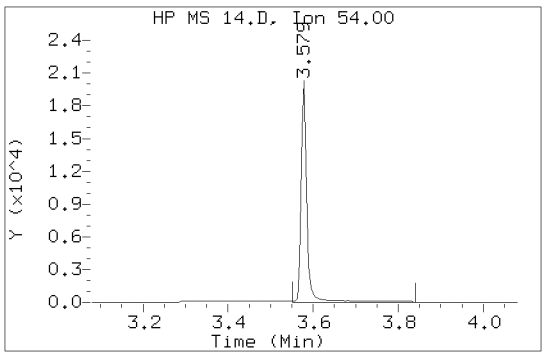
BEFORE

MASS
54
AREA
20065
HEIGHT
20304
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
54
AREA
20065
HEIGHT
20304
29-Jun-2023
14:27
ALSHS
Ser

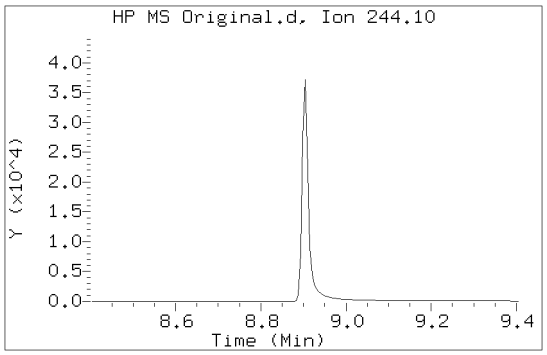


4-Terphenyl-d14 (1718-51-0)

Reason Code:

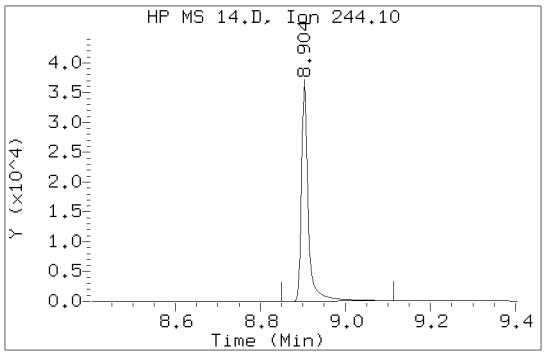
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
244.1
AREA
39805
HEIGHT
37107
29-Jun-2023
14:27
ALSHS
Ser



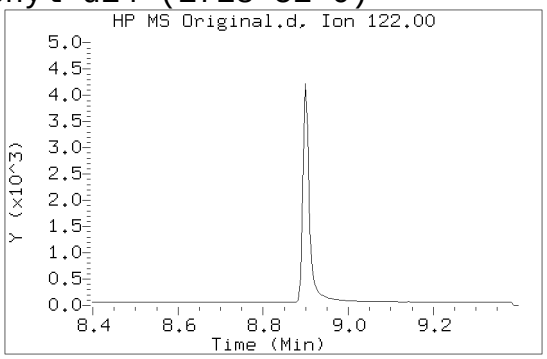
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\14.D
Inj Date : 16-JUN-2023 14:51
InstruID : SV6.i
LabSampID : 14DXICAL-0.5

4-Terphenyl-d14 (1718-51-0)

Reason Code:

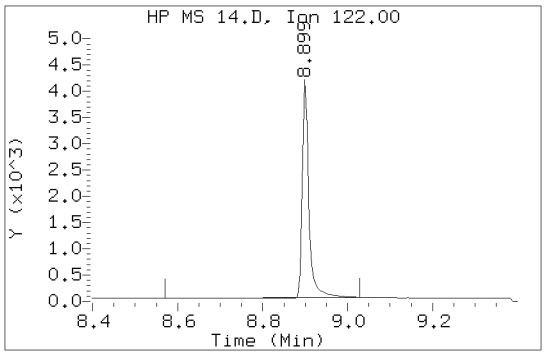
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



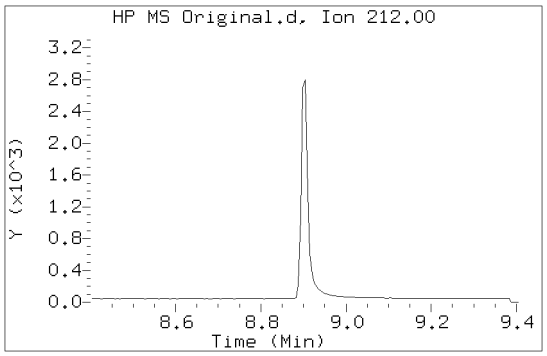
AFTER

MASS
122
AREA
4228
HEIGHT
4149
29-Jun-2023
14:27
ALSHS
Ser



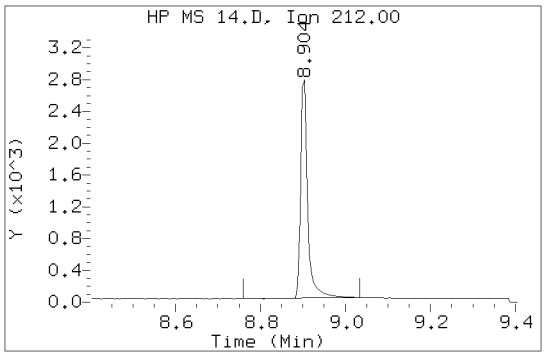
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
212
AREA
3105
HEIGHT
2745
29-Jun-2023
14:27
ALSHS
Ser

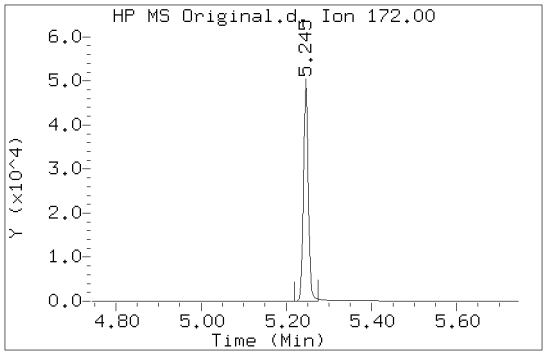


2-Fluorobiphenyl (321-60-8)

Reason Code:

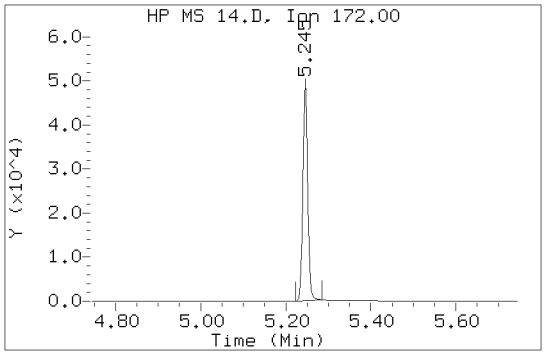
BEFORE

MASS
172
AREA
40002
HEIGHT
50410
16-Jun-2023
15:06
ALSHS
Server



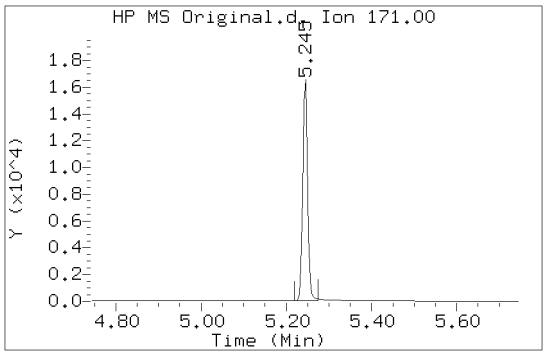
AFTER

MASS
172
AREA
39708
HEIGHT
50322
29-Jun-2023
14:27
ALSHS
Ser



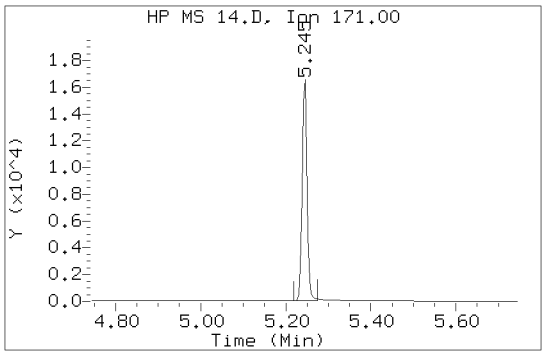
BEFORE

MASS
171
AREA
13389
HEIGHT
16514
16-Jun-2023
15:06
ALSHS
Server



AFTER

MASS
171
AREA
13389
HEIGHT
16514
29-Jun-2023
14:27
ALSHS
Ser



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\15.D
Lab Smp Id: 14DXICAL-0.2 Client Smp ID: 14DXICAL-0.2
Inj Date : 16-JUN-2023 15:56
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICAL-0.2RR
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 14:51 Cal File: 14.D
Als bottle: 15 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.122	3.122	(1.000)	3731	0.10000	(aM)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	12688	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	8839	0.20000	0.2304(AM)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	7256	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.245	5.245	(0.891)	18173	0.20000	0.2446(AM)
* 126 Phenanthrene-d10	188	7.322	7.322	(1.000)	14346	0.10000	
* 182 Chrysene-d12	240	10.023	10.023	(1.000)	8796	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.904	8.904	(0.888)	17639	0.20000	0.2748(AM)
* 198 Perylene-d12	264	11.940	11.940	(1.000)	6565	0.10000	(M)
1 1,4-Dioxane	58	1.460	1.460	(0.468)	2996	0.20000	0.2384(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

01248657

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\15.D

Page 1

Date : 16-JUN-2023 15:56

Client ID: 14DXICAL-0.2

Instrument: SV6.i

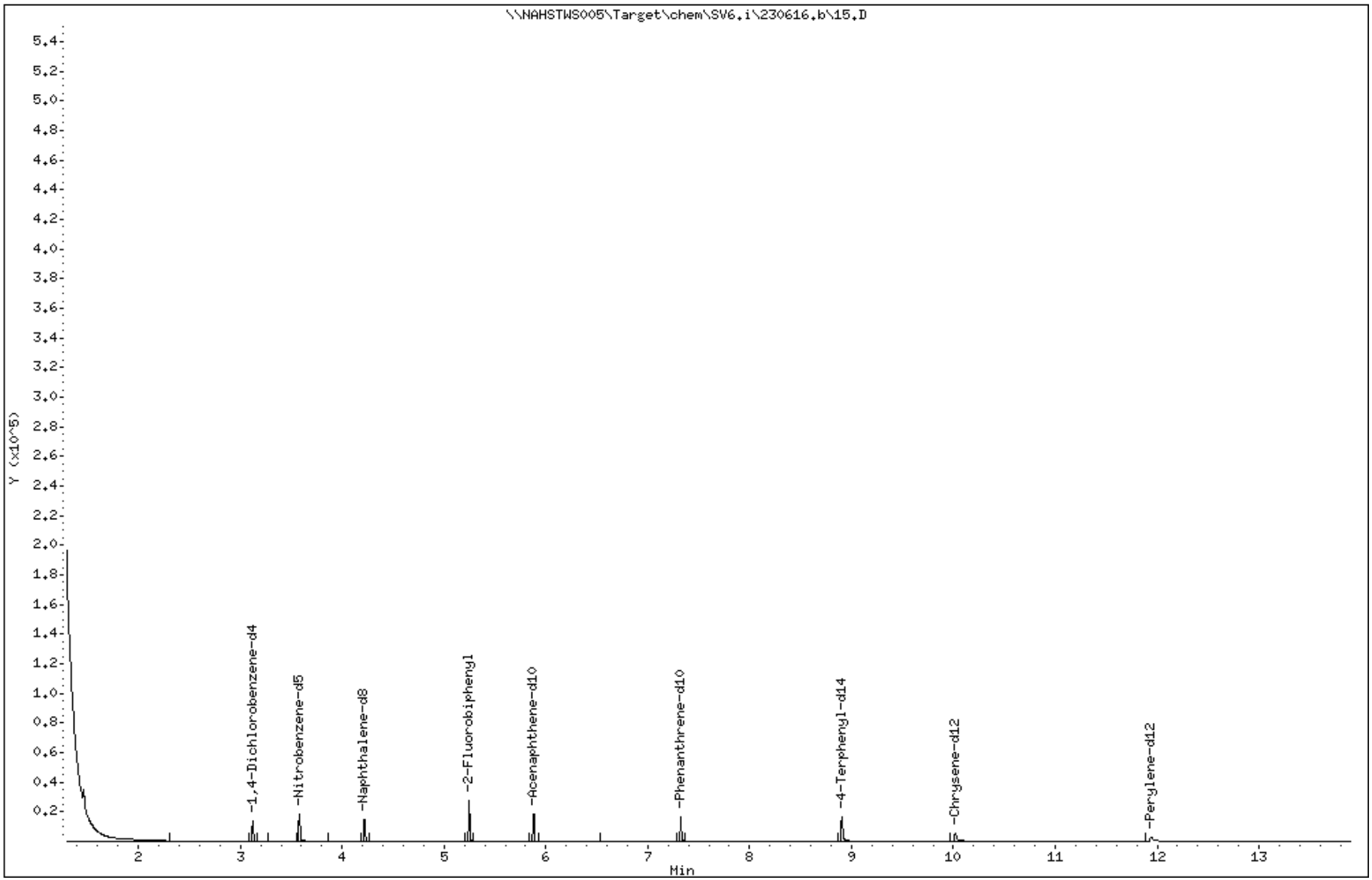
Sample Info: 14DXICAL-0.2RR

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



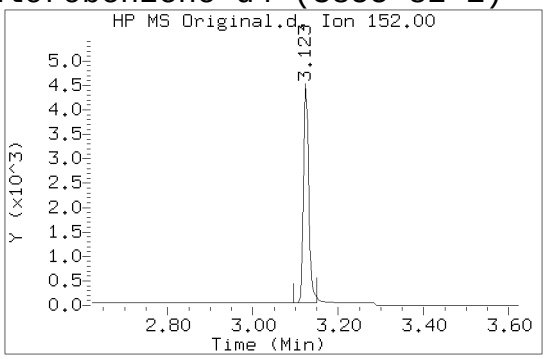
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\15.D
Inj Date : 16-JUN-2023 15:56
InstruID : SV6.i
LabSampID : 14DXICAL-0.2

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

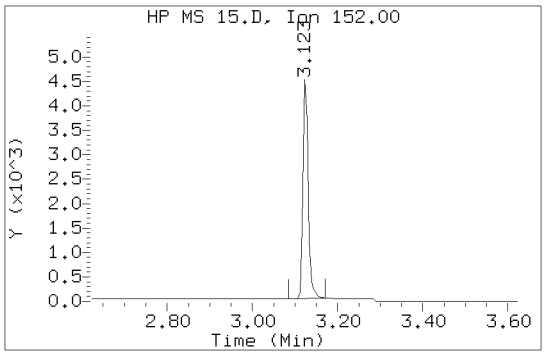
BEFORE

MASS
152
AREA
3749
HEIGHT
4489
16-Jun-2023
16:11
ALSHS
Server



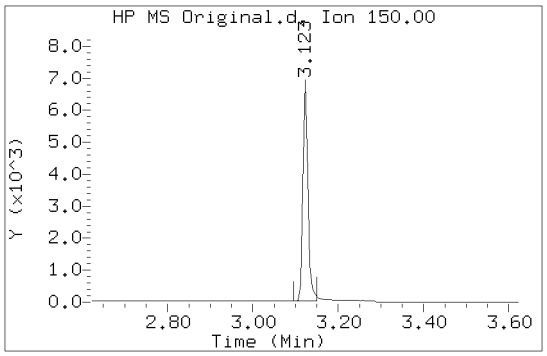
AFTER

MASS
152
AREA
3731
HEIGHT
4478
29-Jun-2023
14:27
ALSHS
Ser



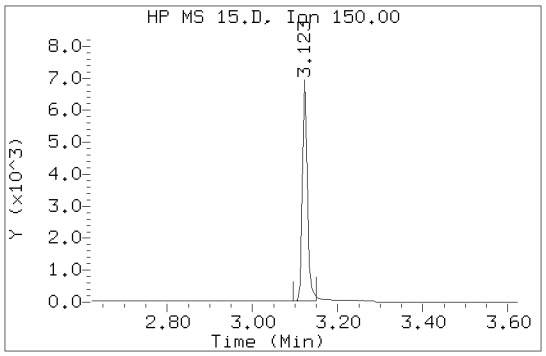
BEFORE

MASS
150
AREA
5426
HEIGHT
6903
16-Jun-2023
16:11
ALSHS
Server



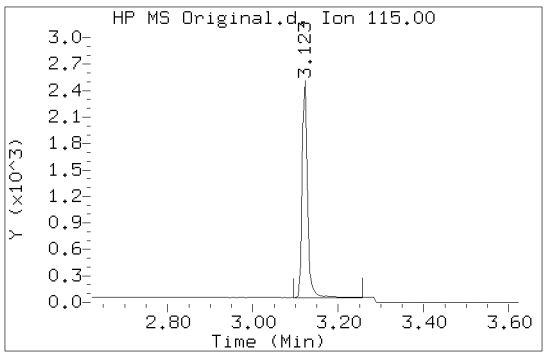
AFTER

MASS
150
AREA
5426
HEIGHT
6903
29-Jun-2023
14:27
ALSHS
Ser



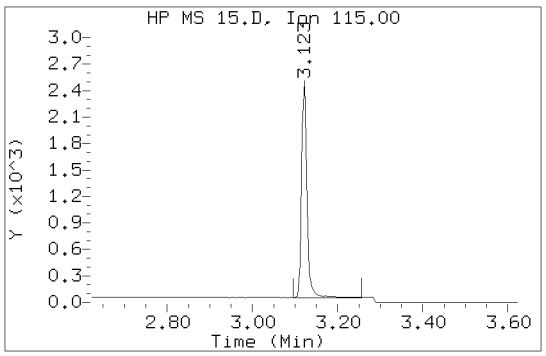
BEFORE

MASS
115
AREA
2094
HEIGHT
2459
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
115
AREA
2094
HEIGHT
2459
29-Jun-2023
14:27
ALSHS
Ser

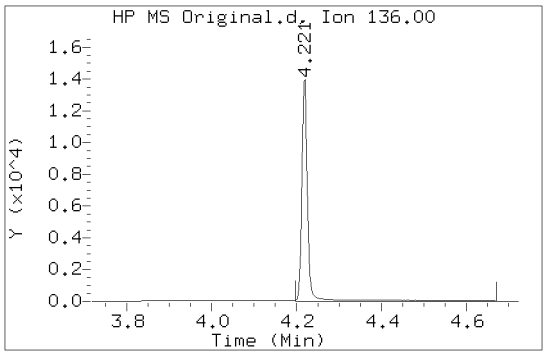


Naphthalene-d8 (1146-65-2)

Reason Code:

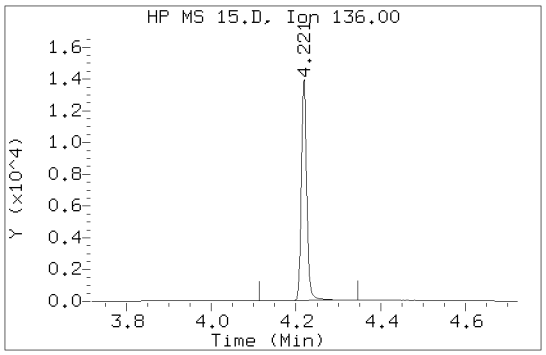
BEFORE

MASS
136
AREA
14465
HEIGHT
13959
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
136
AREA
12688
HEIGHT
13897
29-Jun-2023
14:27
ALSHS
Ser



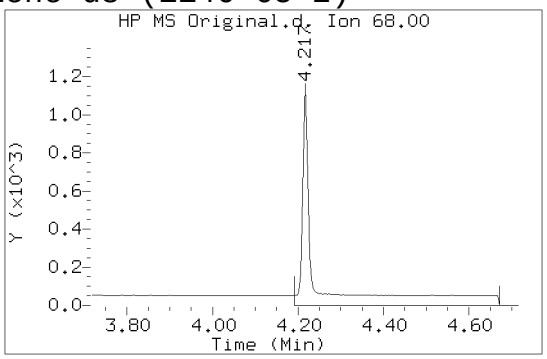
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\15.D
Inj Date : 16-JUN-2023 15:56
InstruID : SV6.i
LabSampID : 14DXICAL-0.2

Naphthalene-d8 (1146-65-2)

Reason Code:

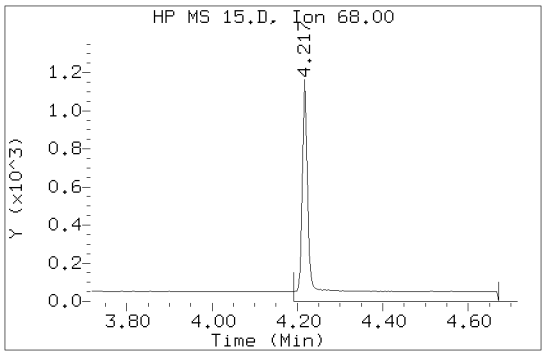
BEFORE

MASS
68
AREA
2461
HEIGHT
1163
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
68
AREA
2461
HEIGHT
1163
29-Jun-2023
14:27
ALSHS
Ser

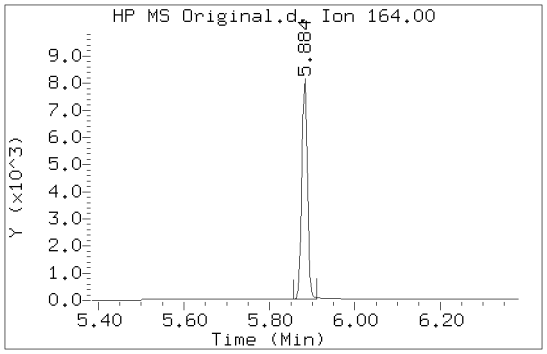


Acenaphthene-d10 (15067-26-2)

Reason Code:

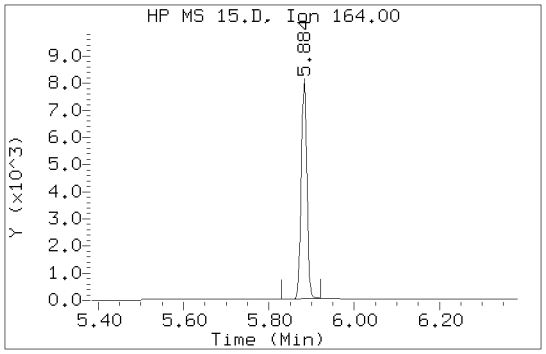
BEFORE

MASS
164
AREA
7305
HEIGHT
8114
16-Jun-2023
16:11
ALSHS
Server



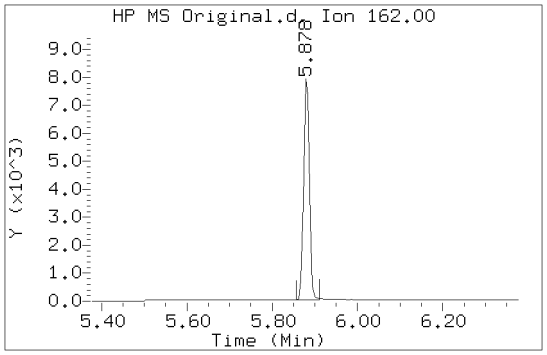
AFTER

MASS
164
AREA
7256
HEIGHT
8100
29-Jun-2023
14:27
ALSHS
Ser



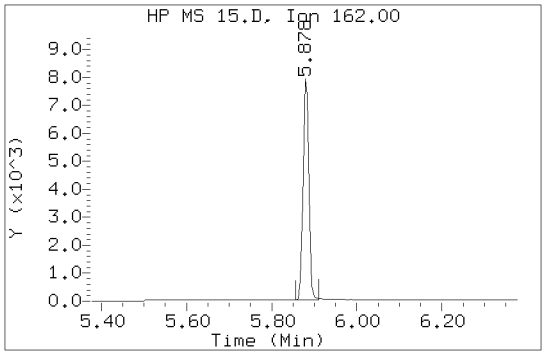
BEFORE

MASS
162
AREA
7389
HEIGHT
7893
16-Jun-2023
16:11
ALSHS
Server



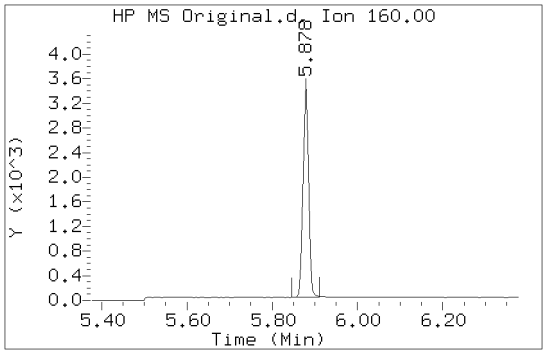
AFTER

MASS
162
AREA
7389
HEIGHT
7893
29-Jun-2023
14:27
ALSHS
Ser



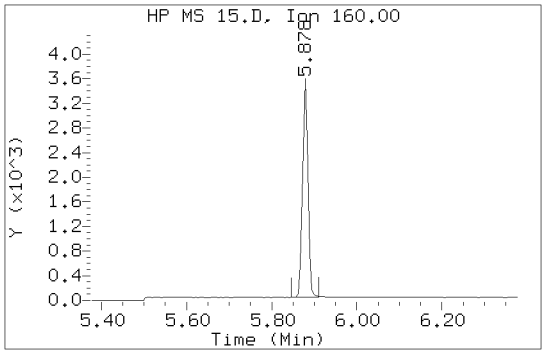
BEFORE

MASS
160
AREA
3110
HEIGHT
3554
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
160
AREA
3110
HEIGHT
3554
29-Jun-2023
14:27
ALSHS
Ser



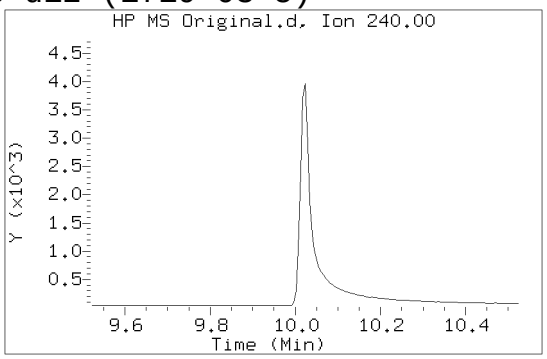
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Inj Date : 16-JUN-2023 15:56
InstruID : SV6.i
LabSampID : 14DXICAL-0.2

Chrysene-d12 (1719-03-5)

Reason Code:

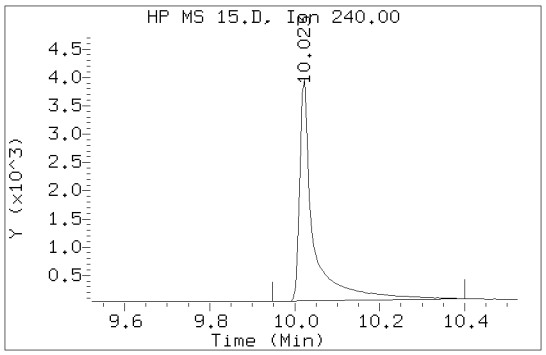
BEFORE

MASS
240
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



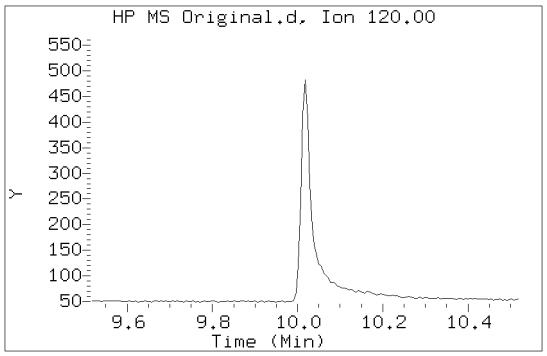
AFTER

MASS
240
AREA
8796
HEIGHT
3907
29-Jun-2023
14:27
ALSHS
Ser



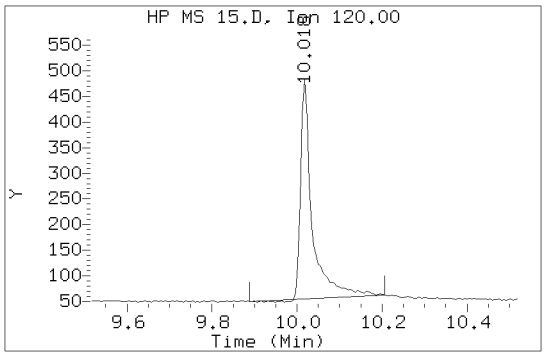
BEFORE

MASS
120
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



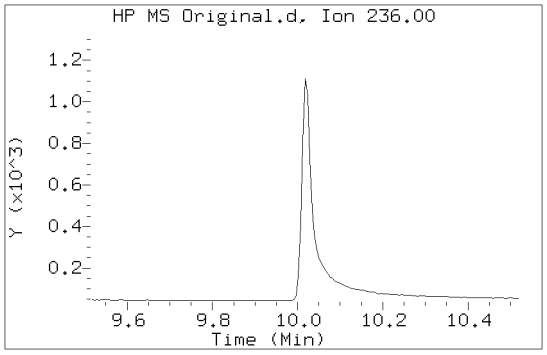
AFTER

MASS
120
AREA
798
HEIGHT
426
29-Jun-2023
14:27
ALSHS
Ser



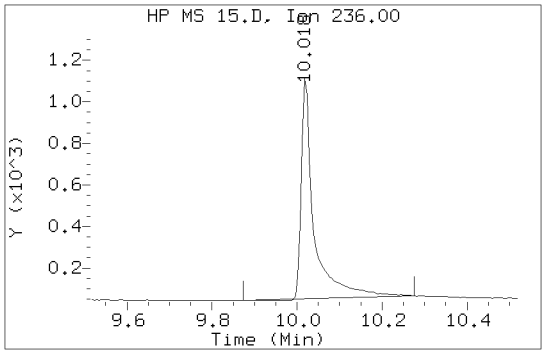
BEFORE

MASS
236
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
236
AREA
2198
HEIGHT
1058
29-Jun-2023
14:27
ALSHS
Ser

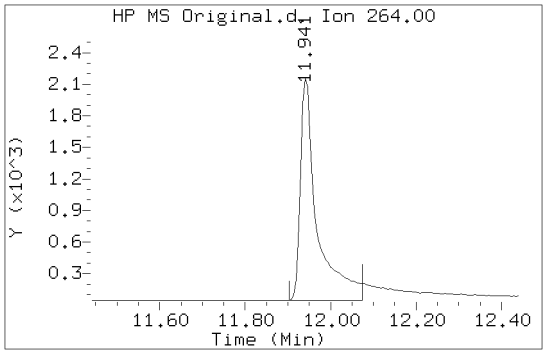


Perylene-d12 (1520-96-3)

Reason Code:

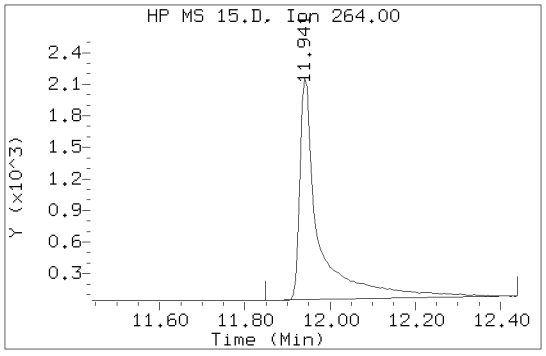
BEFORE

MASS
264
AREA
5713
HEIGHT
2106
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
264
AREA
6565
HEIGHT
2100
29-Jun-2023
14:27
ALSHS
Ser



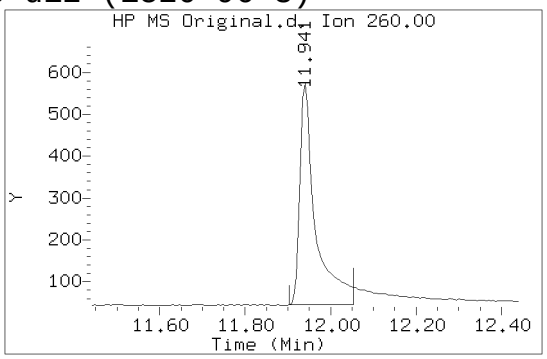
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\15.D
Inj Date : 16-JUN-2023 15:56
InstruID : SV6.i
LabSampID : 14DXICAL-0.2

Perylene-d12 (1520-96-3)

Reason Code:

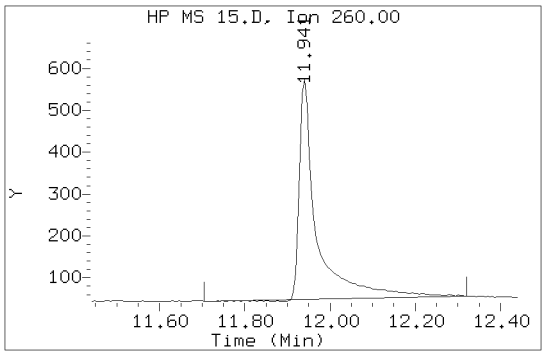
BEFORE

MASS
260
AREA
1348
HEIGHT
528
16-Jun-2023
16:11
ALSHS
Server



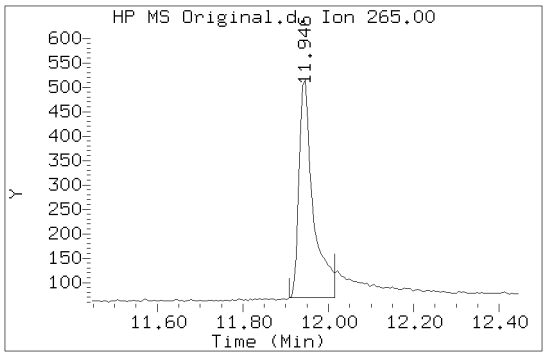
AFTER

MASS
260
AREA
1491
HEIGHT
524
29-Jun-2023
14:27
ALSHS
Ser



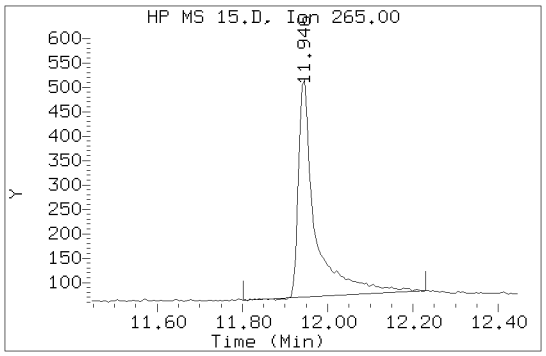
BEFORE

MASS
265
AREA
1037
HEIGHT
446
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
265
AREA
1210
HEIGHT
444
29-Jun-2023
14:27
ALSHS
Ser

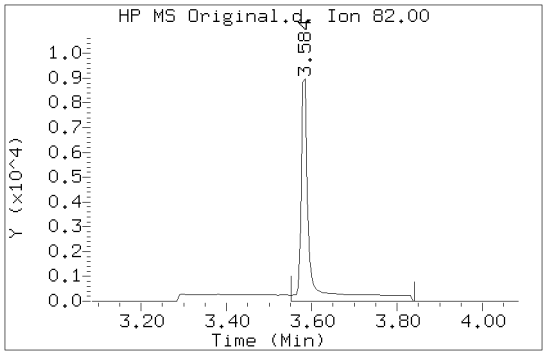


Nitrobenzene-d5 (4165-60-0)

Reason Code:

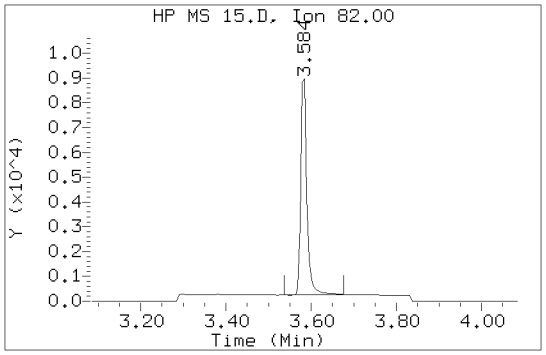
BEFORE

MASS
82
AREA
13113
HEIGHT
8968
16-Jun-2023
16:11
ALSHS
Server



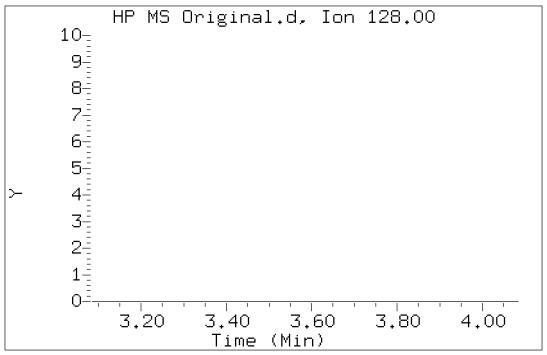
AFTER

MASS
82
AREA
8839
HEIGHT
8709
29-Jun-2023
14:27
ALSHS
Ser



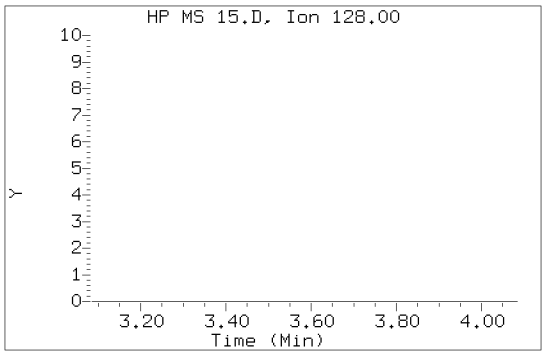
BEFORE

MASS
128
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
29-Jun-2023
14:27
ALSHS
Ser



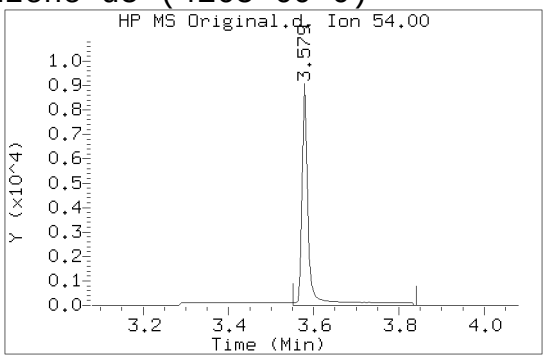
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Inj Date : 16-JUN-2023 15:56
InstruID : SV6.i
LabSampID : 14DXICAL-0.2

Nitrobenzene-d5 (4165-60-0)

Reason Code:

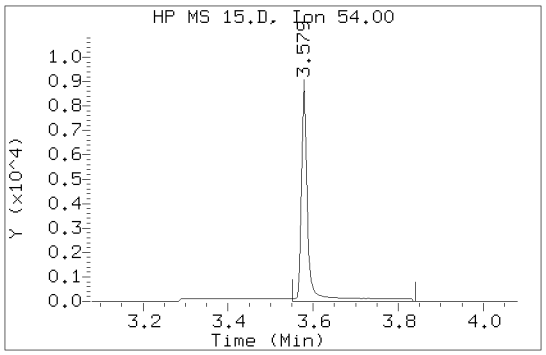
BEFORE

MASS
54
AREA
10106
HEIGHT
9078
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
54
AREA
10106
HEIGHT
9078
29-Jun-2023
14:27
ALSHS
Ser

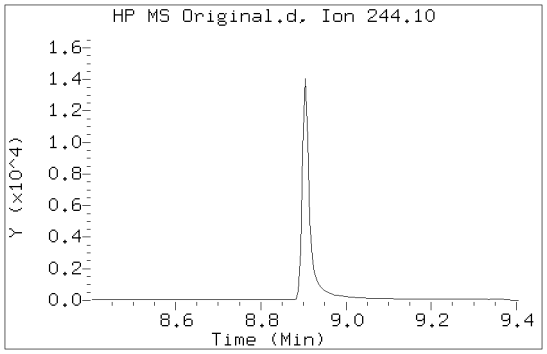


4-Terphenyl-d14 (1718-51-0)

Reason Code:

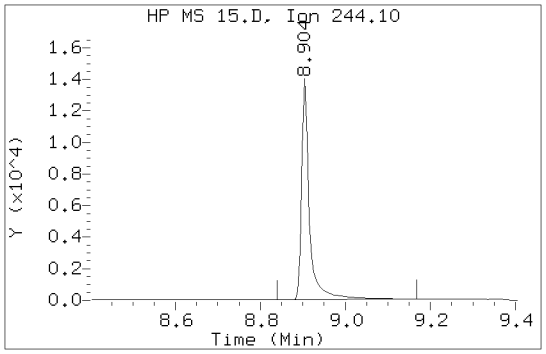
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



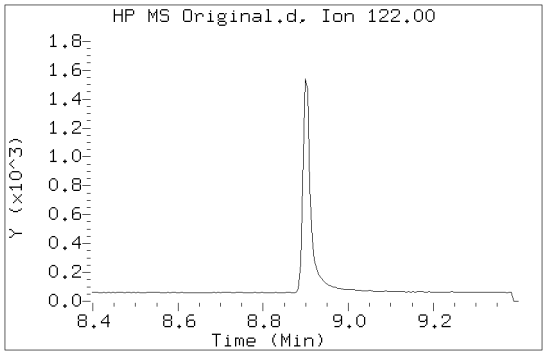
AFTER

MASS
244.1
AREA
17639
HEIGHT
13989
29-Jun-2023
14:27
ALSHS
Ser



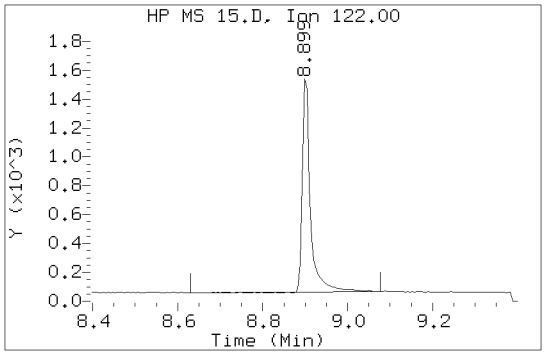
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



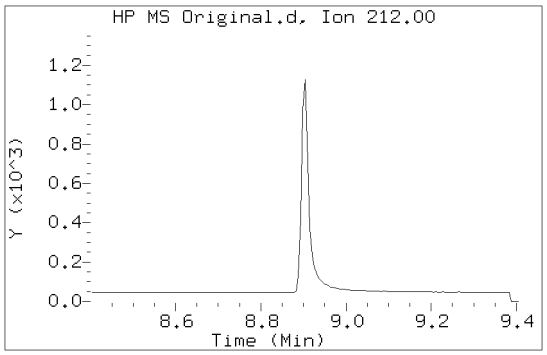
AFTER

MASS
122
AREA
1896
HEIGHT
1474
29-Jun-2023
14:27
ALSHS
Ser



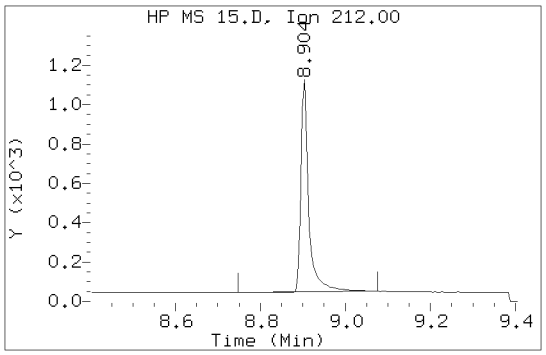
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
212
AREA
1371
HEIGHT
1079
29-Jun-2023
14:27
ALSHS
Ser



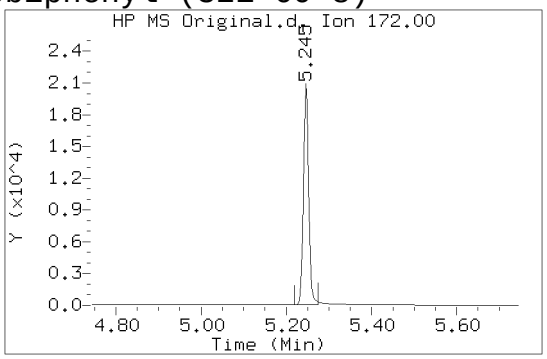
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Inj Date : 16-JUN-2023 15:56
InstruID : SV6.i
LabSampID : 14DXICAL-0.2

2-Fluorobiphenyl (321-60-8)

Reason Code:

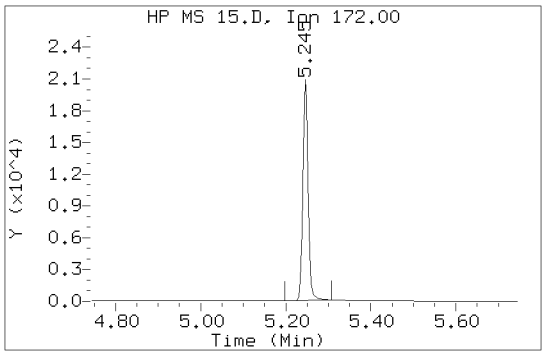
BEFORE

MASS
172
AREA
18197
HEIGHT
20880
16-Jun-2023
16:11
ALSHS
Server



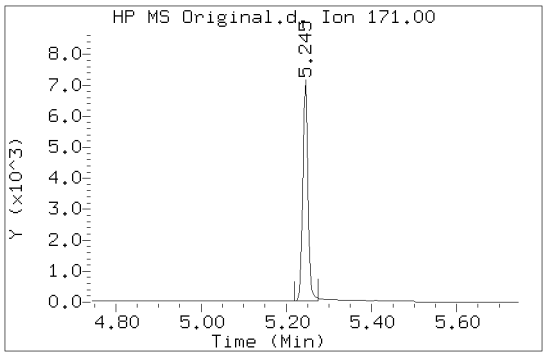
AFTER

MASS
172
AREA
18173
HEIGHT
20843
29-Jun-2023
14:27
ALSHS
Ser



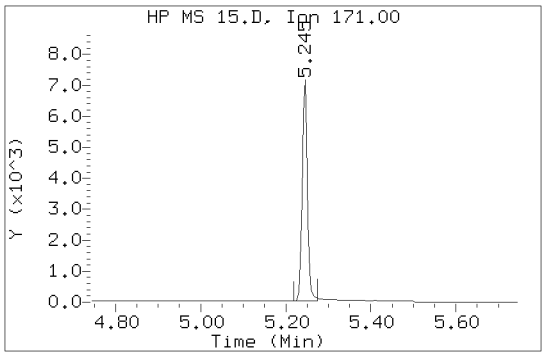
BEFORE

MASS
171
AREA
6120
HEIGHT
7129
16-Jun-2023
16:11
ALSHS
Server



AFTER

MASS
171
AREA
6120
HEIGHT
7129
29-Jun-2023
14:27
ALSHS
Ser



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\NAHSTWS005\Target\chem\SV6.i\230616.b\16.D
Lab Smp Id: 14DXICV-0.08 Client Smp ID: 14DXICV-0.08
Inj Date : 16-JUN-2023 16:22
Operator : LG Inst ID: SV6.i
Smp Info : 14DXICV-0.08
Misc Info : ;;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\SV6.i\230616.b\DXSIM.m
Meth Date : 29-Jun-2023 14:27 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 16 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.128	3.122	(1.000)	5295	0.10000	(aM)
* 45 Naphthalene-d8	136	4.220	4.220	(1.000)	17725	0.10000	(M)
$ 33 Nitrobenzene-d5	82	3.584	3.584	(0.849)	3797	0.07086	0.07086(M)
* 86 Acenaphthene-d10	164	5.883	5.883	(1.000)	10379	0.10000	(M)
$ 69 2-Fluorobiphenyl	172	5.248	5.245	(0.892)	8542	0.08036	0.08036(M)
* 126 Phenanthrene-d10	188	7.328	7.322	(1.000)	20505	0.10000	(M)
* 182 Chrysene-d12	240	10.023	10.023	(1.000)	12662	0.10000	(M)
$ 158 4-Terphenyl-d14	244	8.909	8.904	(0.889)	7743	0.08379	0.08379(M)
* 198 Perylene-d12	264	11.945	11.940	(1.000)	10635	0.10000	(M)
1 1,4-Dioxane	58	1.464	1.460	(0.468)	1261	0.07070	0.07070(M)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01248665

Data File: \\NAHSTWS005\Target\chem\SV6.i\230616.b\16.D

Page 1

Date : 16-JUN-2023 16:22

Client ID: 14DXICV-0.08

Instrument: SV6.i

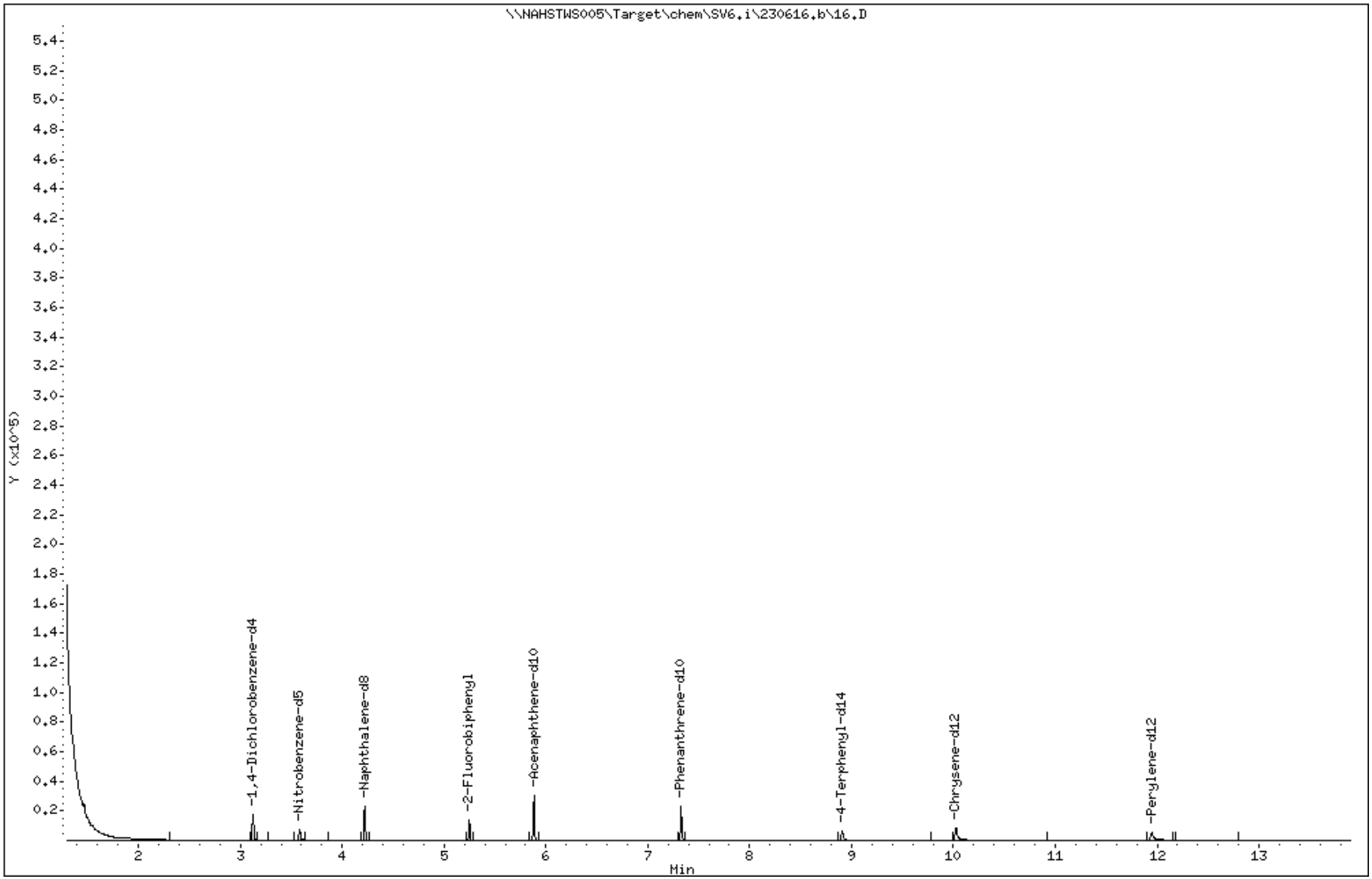
Sample Info: 14DXICV-0.08

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



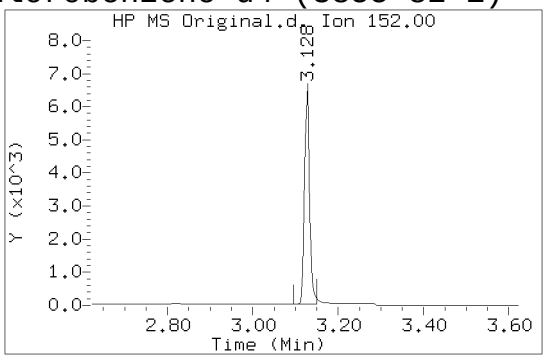
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Inj Date : 16-JUN-2023 16:22
InstruID : SV6.i
LabSampID : 14DXICV-0.08

1,4-Dichlorobenzene-d4 (3855-82-1)

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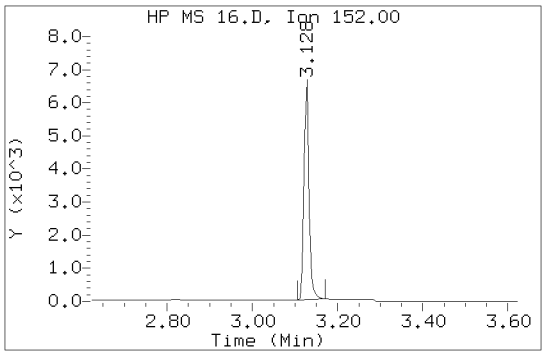
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16-Jun-2023
16:37
ALSHS
Server



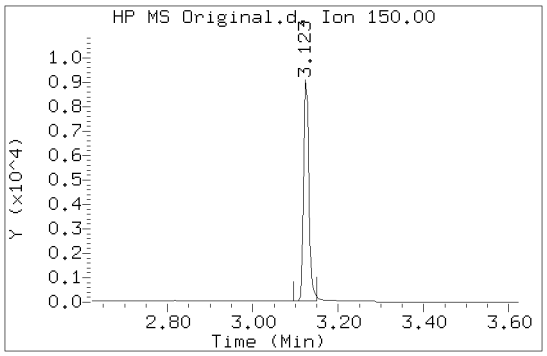
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14:27
ALSHS
Ser



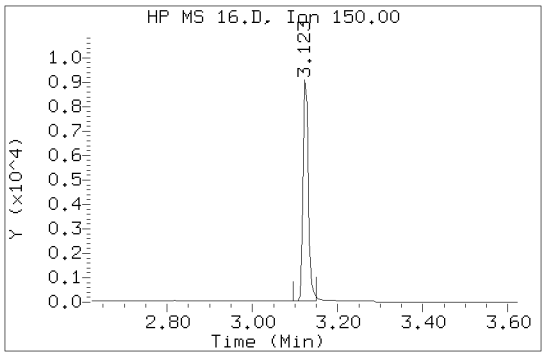
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16:37
ALSHS
Server



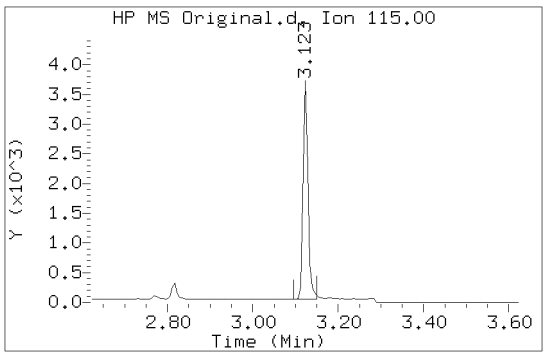
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ALSHS
Ser



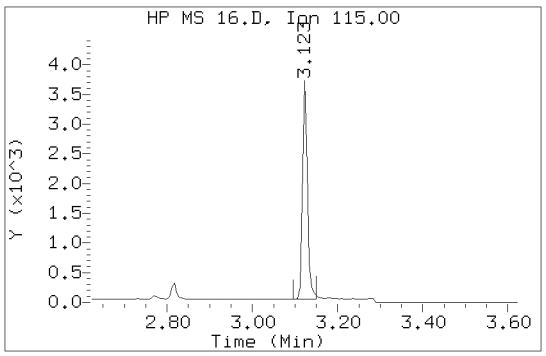
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HEIGHT
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16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
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HEIGHT
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29-Jun-2023
14:27
ALSHS
Ser

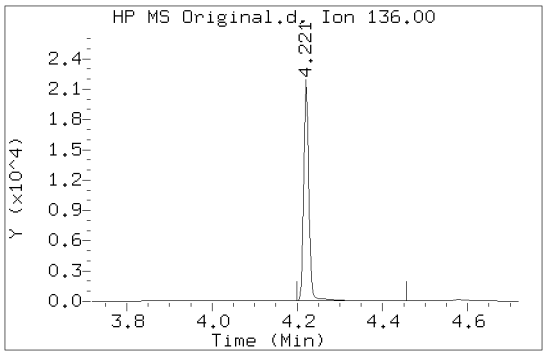


Naphthalene-d8 (1146-65-2)

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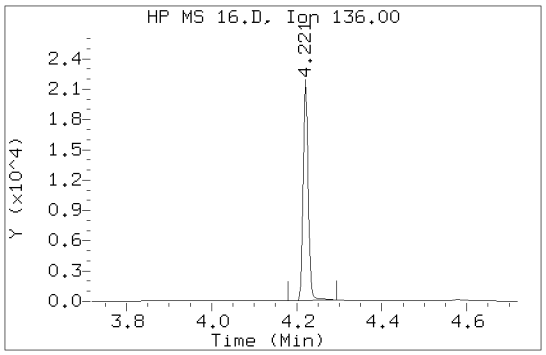
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HEIGHT
21880
16-Jun-2023
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ALSHS
Server



AFTER

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AREA
17725
HEIGHT
21858
29-Jun-2023
14:27
ALSHS
Ser



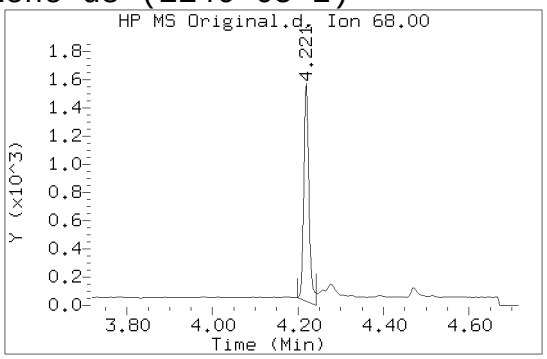
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InstruID : SV6.i
LabSampID : 14DXICV-0.08

Naphthalene-d8 (1146-65-2)

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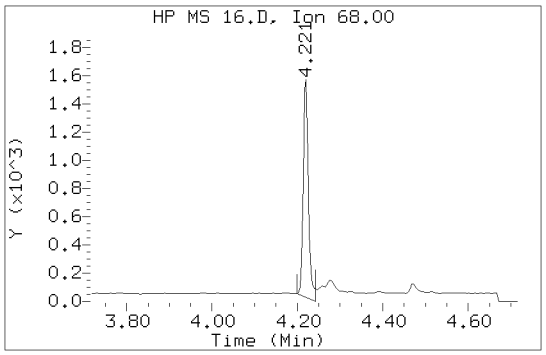
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AREA
1351
HEIGHT
1544
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
68
AREA
1351
HEIGHT
1544
29-Jun-2023
14:27
ALSHS
Ser

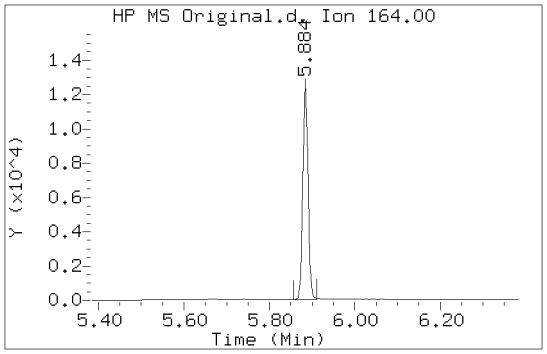


Acenaphthene-d10 (15067-26-2)

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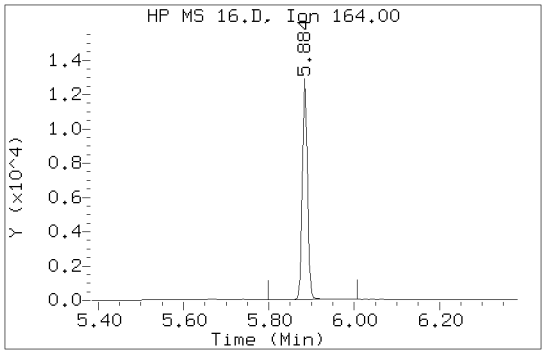
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Server



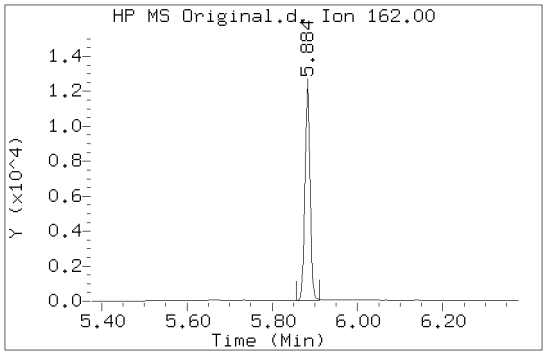
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ALSHS
Ser



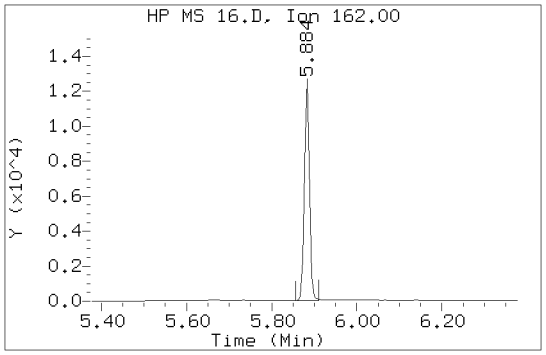
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16-Jun-2023
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ALSHS
Server



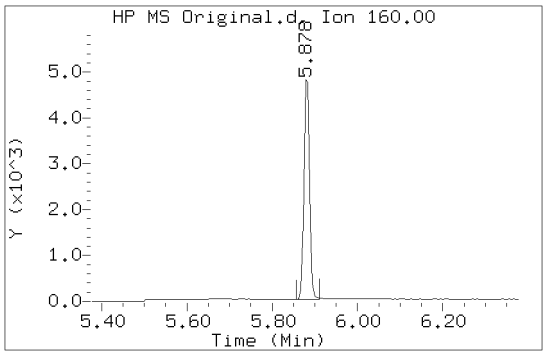
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ALSHS
Ser



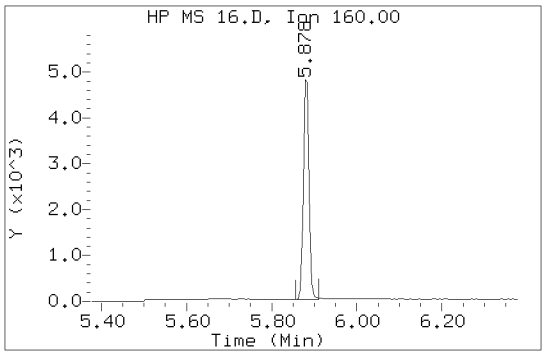
BEFORE

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HEIGHT
4785
16-Jun-2023
16:37
ALSHS
Server



AFTER

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4356
HEIGHT
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29-Jun-2023
14:27
ALSHS
Ser



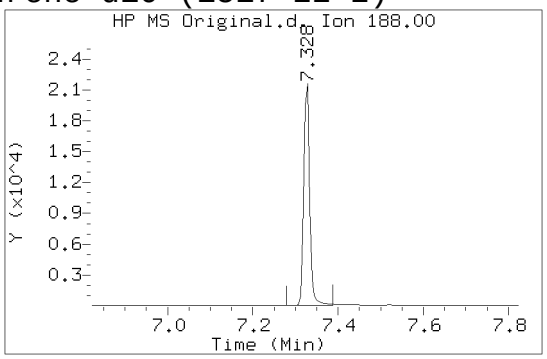
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Inj Date : 16-JUN-2023 16:22
InstruID : SV6.i
LabSampID : 14DXICV-0.08

Phenanthrene-d10 (1517-22-2)

Reason Code:

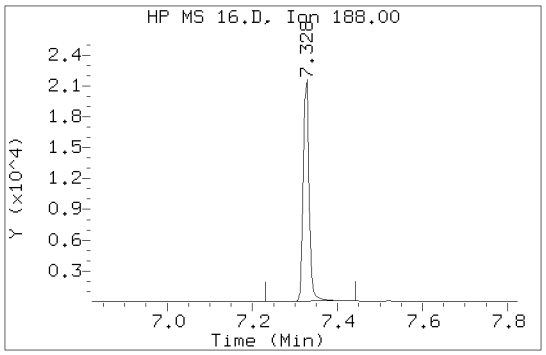
BEFORE

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HEIGHT
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16-Jun-2023
16:37
ALSHS
Server



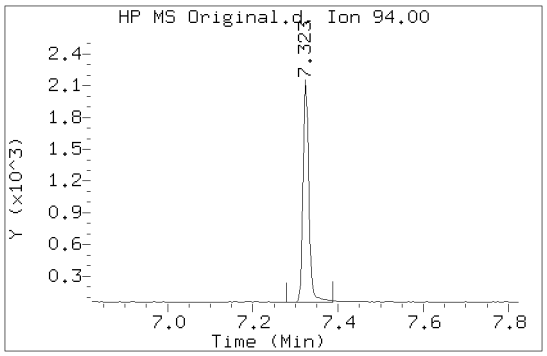
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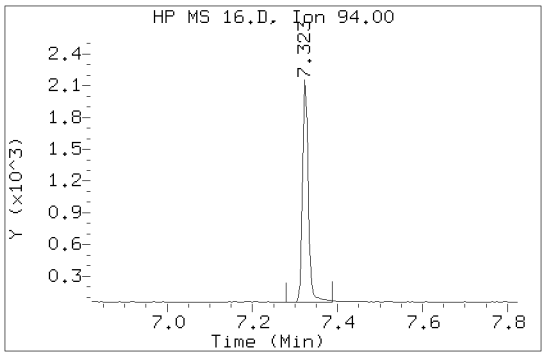
BEFORE

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16:37
ALSHS
Server



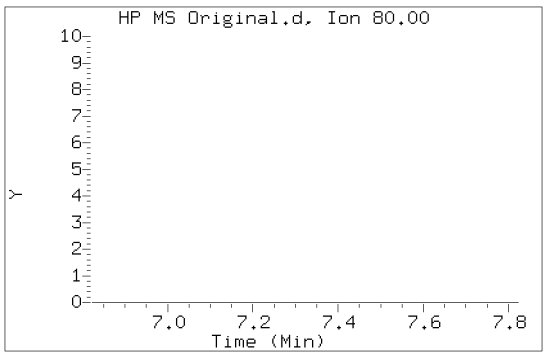
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14:27
ALSHS
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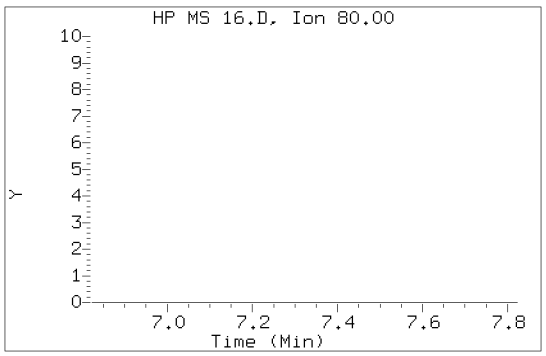
BEFORE

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16-Jun-2023
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AFTER

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29-Jun-2023
14:27
ALSHS
Ser

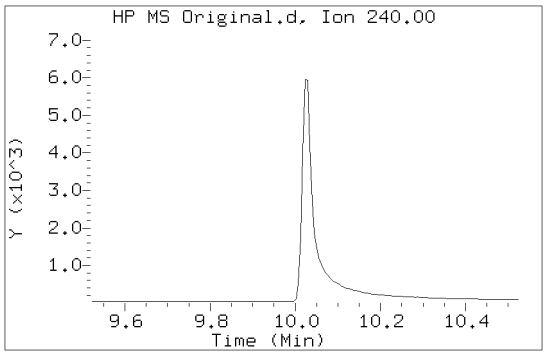


Chrysene-d12 (1719-03-5)

Reason Code:

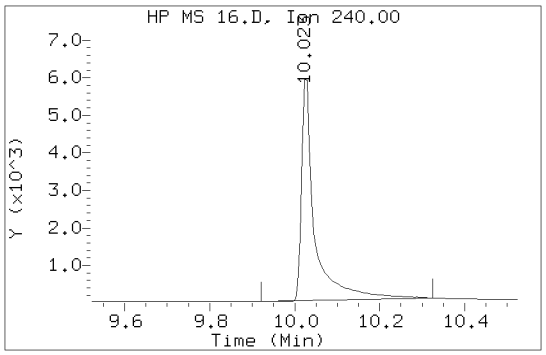
BEFORE

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HEIGHT
0
16-Jun-2023
16:37
ALSHS
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AFTER

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AREA
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HEIGHT
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29-Jun-2023
14:27
ALSHS
Ser



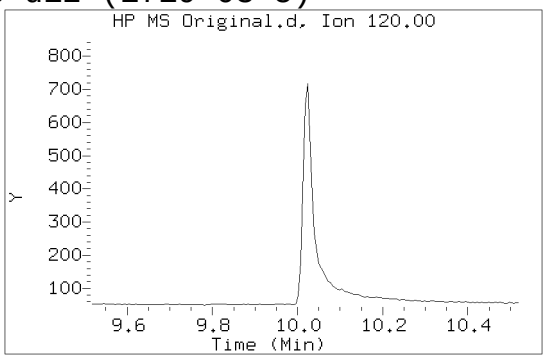
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InstruID : SV6.i
LabSampID : 14DXICV-0.08

Chrysene-d12 (1719-03-5)

Reason Code:

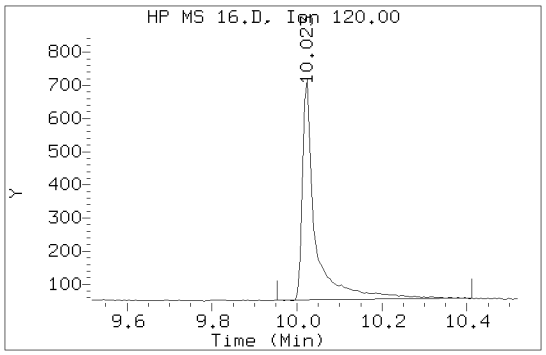
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ALSHS
Server



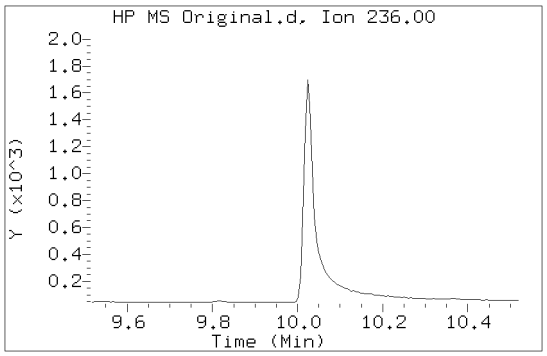
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ALSHS
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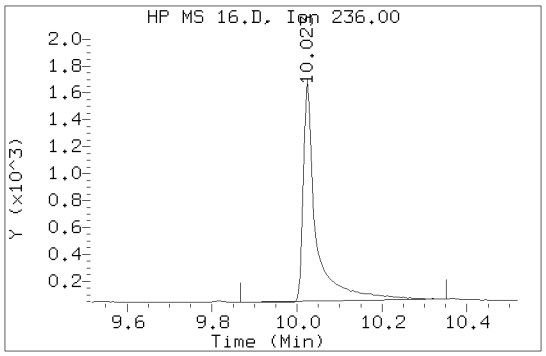
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16:37
ALSHS
Server



AFTER

MASS
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3367
HEIGHT
1641
29-Jun-2023
14:27
ALSHS
Ser

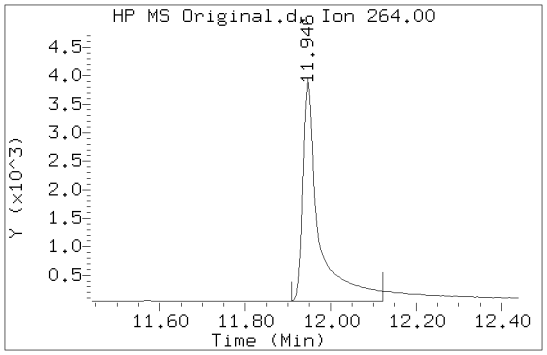


Perylene-d12 (1520-96-3)

Reason Code:

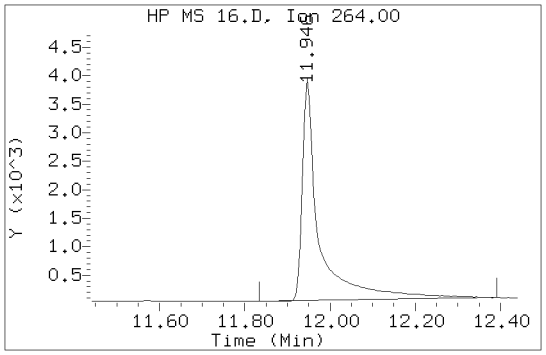
BEFORE

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AREA
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HEIGHT
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16-Jun-2023
16:37
ALSHS
Server



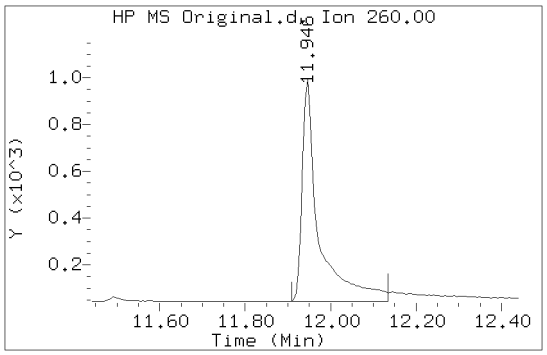
AFTER

MASS
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10635
HEIGHT
3885
29-Jun-2023
14:27
ALSHS
Ser



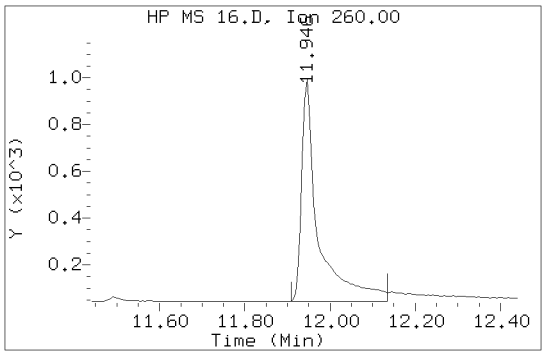
BEFORE

MASS
260
AREA
2544
HEIGHT
947
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
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AREA
2544
HEIGHT
947
29-Jun-2023
14:27
ALSHS
Ser



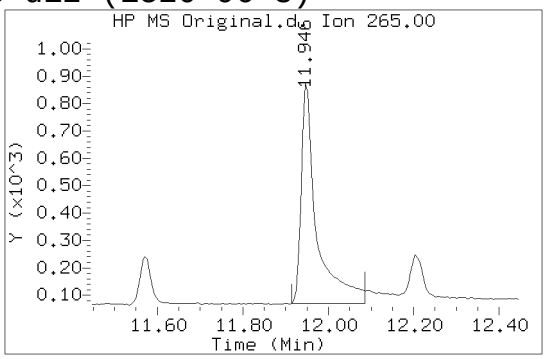
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Inj Date : 16-JUN-2023 16:22
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LabSampID : 14DXICV-0.08

Perylene-d12 (1520-96-3)

Reason Code:

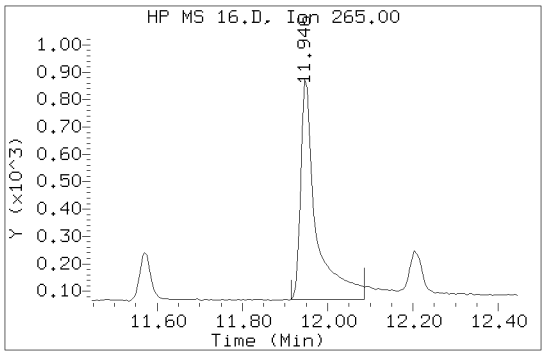
BEFORE

MASS
265
AREA
2015
HEIGHT
803
16-Jun-2023
16:37
ALSHS
Server



AFTER

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AREA
2015
HEIGHT
803
29-Jun-2023
14:27
ALSHS
Ser

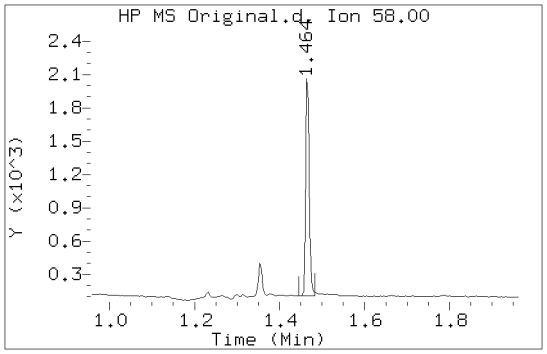


1,4-Dioxane ()

Reason Code:

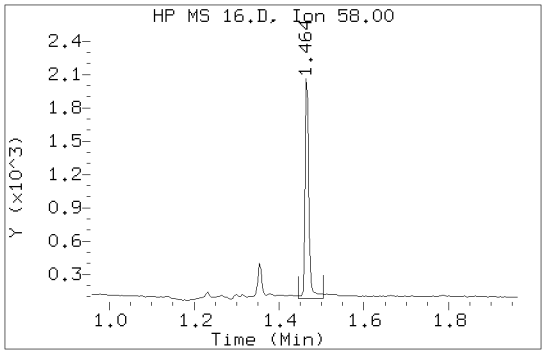
BEFORE

MASS
58
AREA
1149
HEIGHT
1956
16-Jun-2023
16:37
ALSHS
Server



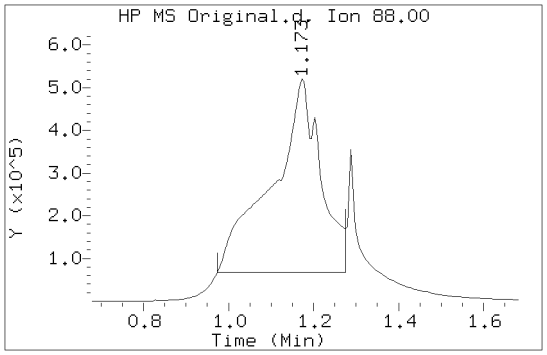
AFTER

MASS
58
AREA
1261
HEIGHT
1979
29-Jun-2023
14:27
ALSHS
Ser



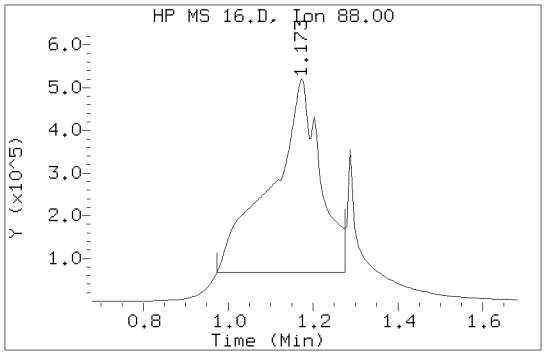
BEFORE

MASS
88
AREA
3609729
HEIGHT
452352
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
88
AREA
3609729
HEIGHT
452352
29-Jun-2023
14:27
ALSHS
Ser

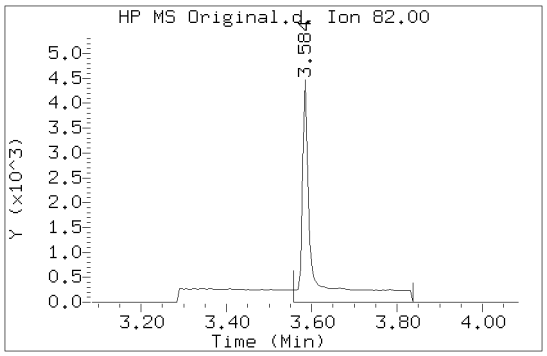


Nitrobenzene-d5 (4165-60-0)

Reason Code:

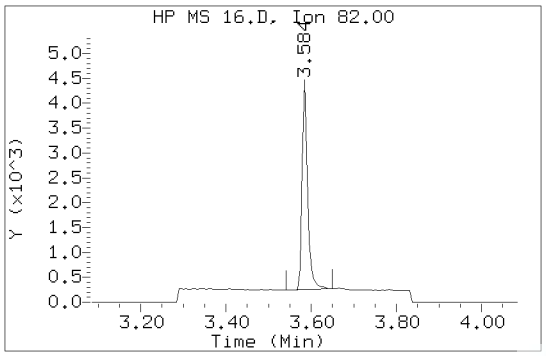
BEFORE

MASS
82
AREA
8001
HEIGHT
4469
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
82
AREA
3797
HEIGHT
4214
29-Jun-2023
14:27
ALSHS
Ser



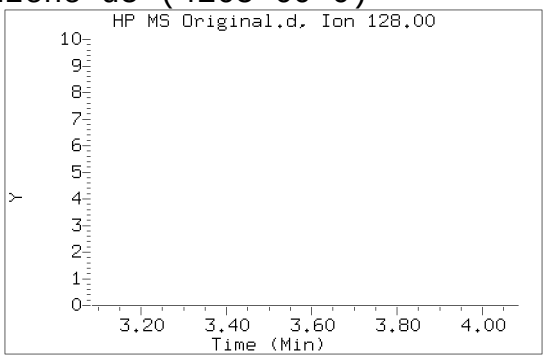
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\16.D
Inj Date : 16-JUN-2023 16:22
InstruID : SV6.i
LabSampID : 14DXICV-0.08

Nitrobenzene-d5 (4165-60-0)

Reason Code:

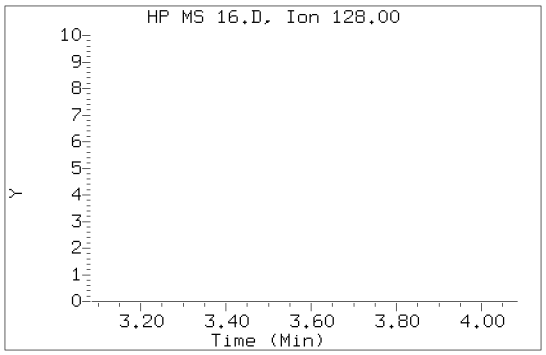
BEFORE

MASS
128
AREA
0
HEIGHT
0
16-Jun-2023
16:37
ALSHS
Server



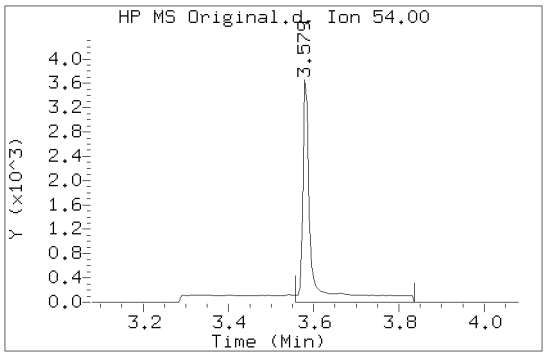
AFTER

MASS
128
AREA
0
HEIGHT
0
29-Jun-2023
14:27
ALSHS
Ser



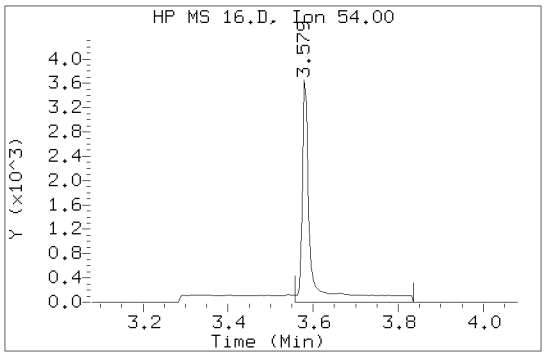
BEFORE

MASS
54
AREA
5382
HEIGHT
3655
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
54
AREA
5382
HEIGHT
3655
29-Jun-2023
14:27
ALSHS
Ser

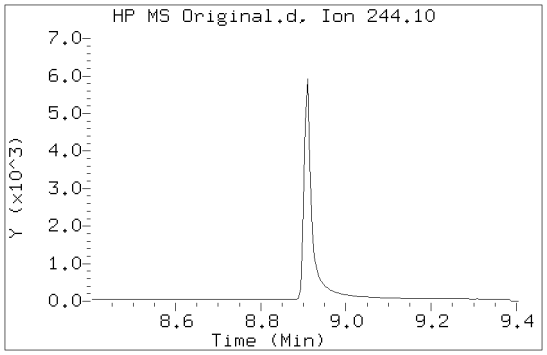


4-Terphenyl-d14 (1718-51-0)

Reason Code:

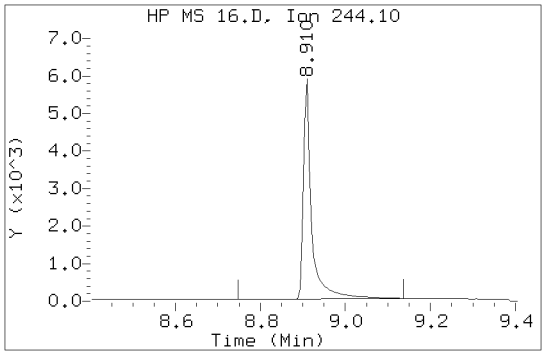
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
16-Jun-2023
16:37
ALSHS
Server



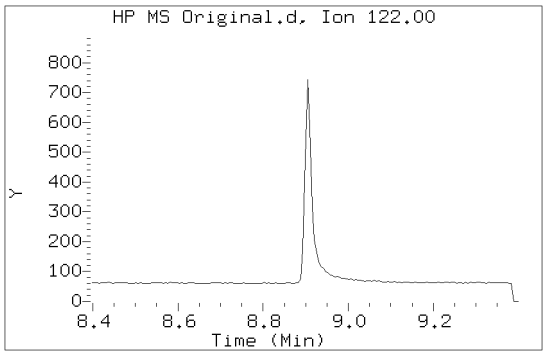
AFTER

MASS
244.1
AREA
7743
HEIGHT
5864
29-Jun-2023
14:27
ALSHS
Ser



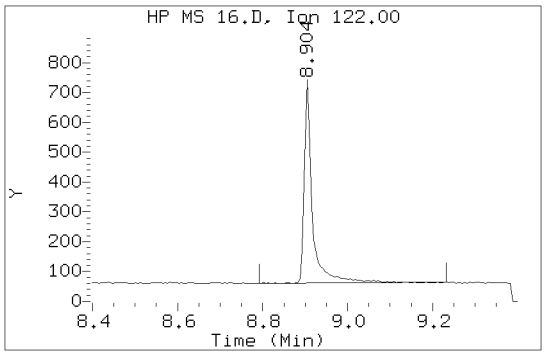
BEFORE

MASS
122
AREA
0
HEIGHT
0
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
122
AREA
889
HEIGHT
681
29-Jun-2023
14:27
ALSHS
Ser



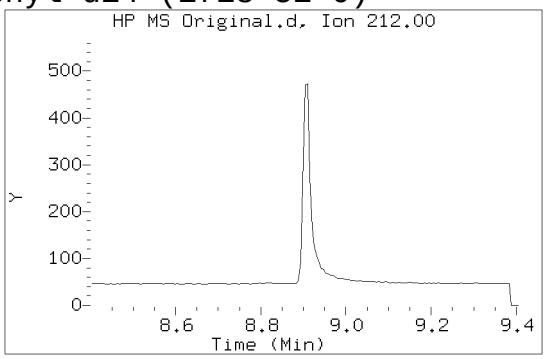
Data File : \\NAHSTWS005\Target\chem\SV6.i\230616.b\16.D
Inj Date : 16-JUN-2023 16:22
InstruID : SV6.i
LabSampID : 14DXICV-0.08

4-Terphenyl-d14 (1718-51-0)

Reason Code:

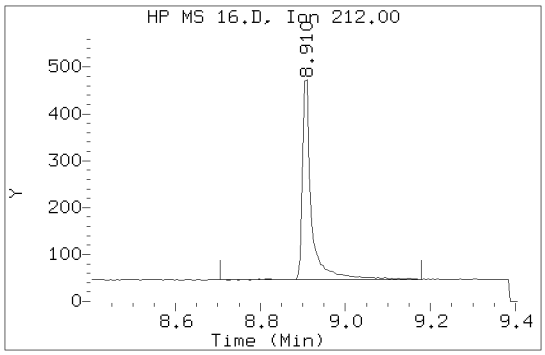
BEFORE

MASS
212
AREA
0
HEIGHT
0
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
212
AREA
632
HEIGHT
426
29-Jun-2023
14:27
ALSHS
Ser

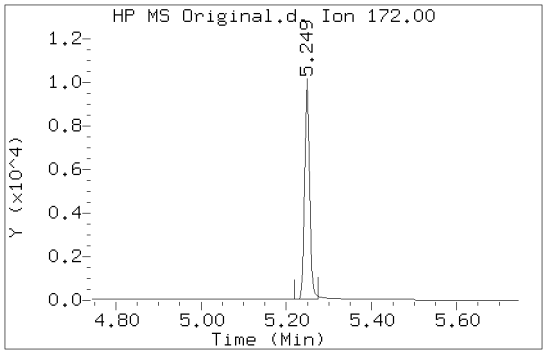


2-Fluorobiphenyl (321-60-8)

Reason Code:

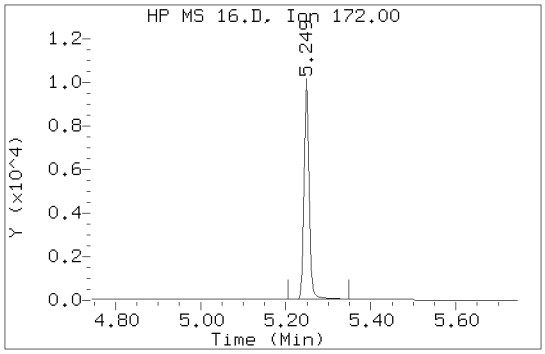
BEFORE

MASS
172
AREA
8416
HEIGHT
10125
16-Jun-2023
16:37
ALSHS
Server



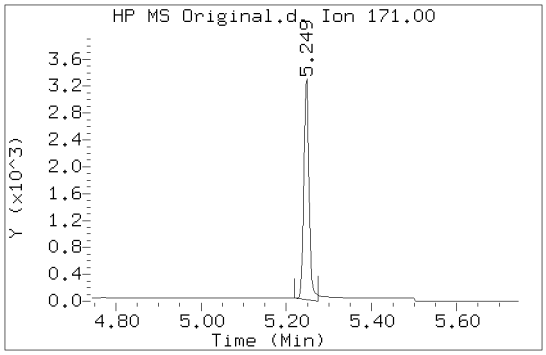
AFTER

MASS
172
AREA
8542
HEIGHT
10120
29-Jun-2023
14:27
ALSHS
Ser



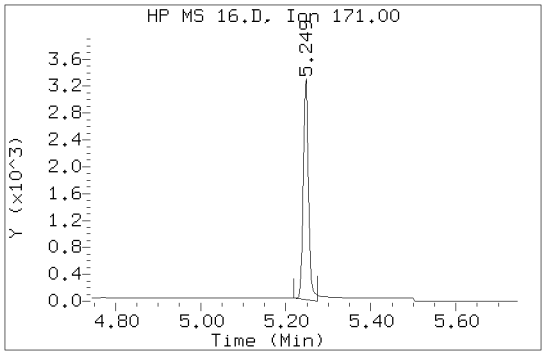
BEFORE

MASS
171
AREA
2911
HEIGHT
3286
16-Jun-2023
16:37
ALSHS
Server



AFTER

MASS
171
AREA
2911
HEIGHT
3286
29-Jun-2023
14:27
ALSHS
Ser



01248673

right solutions.
right partner.

Raw Data SV 6 443683

Semi-Volatiles by EPA 8270SIM

Workorder

HS23080101

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Monthly Effluent Samples

08/14/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

www.alsglobal.com

Data File: \\NAHSTWS005\Target\chem\SV6.i\230810.b\01.D Page 1
Report Date: 14-Aug-2023 14:55

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\SV6.i\230810.b\01.D
Lab Smp Id: DFTPP Client Smp ID: DFTPP
Inj Date : 10-AUG-2023 08:48
Operator : smith Inst ID: SV6.i
Smp Info : DFTPP;DFTPP;3;;DFTPP
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DFTPP.m
Meth Date : 14-Mar-2023 15:59 Linh.Pham Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: None

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)		
RT	EXP RT	DLT RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 dftpp						CAS #: 5074-71-5		
5.657	5.726	-0.069	198	93152			0.00- 100.00	100.00
5.657	6.357	-0.700	51	66256			10.00- 80.00	71.13
5.657	6.357	-0.700	68	655			0.00- 2.00	1.49
5.657	6.357	-0.700	69	43888			0.00- 0.00	47.11
5.657	6.357	-0.700	70	226			0.00- 2.00	0.51
5.657	6.357	-0.700	127	50056			10.00- 80.00	53.74
5.657	6.357	-0.700	197	616			0.00- 2.00	0.66
5.657	6.357	-0.700	199	6753			5.00- 9.00	7.25
5.657	6.357	-0.700	275	21992			10.00- 60.00	23.61
5.657	6.357	-0.700	365	3235			1.00- 100.00	3.47
5.657	6.357	-0.700	441	11357			0.01- 99.99	76.77
5.657	6.357	-0.700	442	75192			50.00- 150.00	80.72
5.657	6.357	-0.700	443	14794			15.00- 24.00	19.67

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	71.13
68	Less than 2.00% of mass 69	0.70 (1.49)
69	Mass 69 relative abundance	47.11
70	Less than 2.00% of mass 69	0.24 (0.51)
127	10.00 - 80.00% of mass 198	53.74
197	Less than 2.00% of mass 198	0.66
199	5.00 - 9.00% of mass 198	7.25
275	10.00 - 60.00% of mass 198	23.61
365	1.00 - 100.00% of mass 198	3.47
441	Present, but less than mass 443	12.19
442	50.00 - 150.00% of mass 198	80.72
443	15.00 - 24.00% of mass 442	15.88 (19.67)

Data File: 01.D
Spectrum: HP ChemStation MS 01.D, Scan 574: 5.657 min.
Location of Maximum: 198.00
Number of points: 230

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	446	112.00	562	182.00	166	252.80	219
37.00	247	116.00	648	183.90	257	254.00	383
38.00	916	117.00	16616	185.00	1927	255.00	54136
39.00	4434	118.00	1277	186.00	14279	256.00	7763
40.00	491	120.00	180	187.00	4058	257.00	746
41.00	245	121.90	841	188.00	349	258.00	3169
44.00	1415	123.00	1386	189.00	687	259.00	477
46.90	293	124.00	779	189.80	153	265.00	1123
48.00	163	125.00	615	191.00	366	266.00	207
49.00	1479	126.10	269	192.00	1264	272.10	218
50.10	17088	127.00	50056	193.00	1502	273.00	1875
51.10	66256	128.00	3404	193.90	269	274.00	3997
52.10	3298	129.00	18224	194.90	173	275.00	21992
54.90	230	130.00	1500	196.00	2658	276.00	3054
56.00	1600	131.00	378	197.00	616	277.00	1996
57.00	3758	132.00	168	198.00	93152	278.00	335
61.00	582	134.00	436	199.00	6753	282.90	228
62.00	706	135.00	1436	200.00	631	285.10	304
63.00	2117	136.00	468	201.50	514	293.00	419
64.00	323	137.00	1028	203.00	741	296.00	7276
65.00	1006	137.90	194	204.00	3598	297.00	842
68.00	655	140.00	190	205.00	6574	303.00	699
69.00	43888	141.00	2185	206.00	24960	304.00	216
70.10	226	142.00	838	207.00	3182	313.90	277
73.00	463	142.90	600	208.00	991	315.00	752
74.00	4859	146.00	446	208.90	268	316.00	461
75.00	7780	147.00	1084	210.00	391	320.90	211
76.00	3148	148.00	3711	211.00	982	323.00	2096
77.10	61504	149.00	608	211.90	189	324.00	412
78.10	4044	149.80	192	215.00	352	327.00	432
79.00	3173	151.00	303	216.00	673	327.90	174
80.00	2418	152.90	727	217.00	6868	332.00	223
81.00	3627	153.90	458	217.90	918	333.00	201
82.00	870	155.00	1432	221.00	4911	334.00	1399
83.00	800	156.00	2152	221.90	1041	334.90	354
83.90	629	157.00	347	223.00	1581	340.90	269
85.00	754	157.90	412	224.00	15072	346.00	450
86.00	1254	158.90	387	225.00	3672	352.00	688
86.90	492	160.00	738	226.00	464	353.00	405
87.90	296	161.00	1141	227.00	6369	354.00	559
91.00	789	161.90	364	228.00	868	365.00	3235
92.00	693	165.00	676	229.00	1495	365.90	420
93.00	6225	166.00	768	229.90	235	372.00	1027
93.90	458	167.00	6838	230.90	527	373.00	198
96.00	381	168.00	3214	234.00	432	382.90	302

98.00	4472	169.00	396	234.90	464	402.00	362
99.00	3632	170.00	166	236.00	412	402.90	638
100.00	316	170.80	205	237.00	546	404.00	278
101.00	2158	172.00	316	238.90	211	421.00	653
103.00	612	173.00	559	239.90	178	422.00	524
104.00	966	174.00	1018	240.90	399	423.00	3475
104.90	1007	175.00	2195	242.00	794	424.00	833
105.90	302	176.00	759	243.00	881	441.00	11357
107.00	16512	177.00	686	244.00	11351	442.00	75192
108.00	2376	178.00	303	245.00	1574	443.00	14794
109.00	381	179.00	3630	246.00	2039	444.00	1277
110.00	25000	180.00	2770	247.00	510		
111.00	4232	181.00	1179	248.90	412		

Data File: \\nahstws005\target\chem\sv6.i\230810.b\01.d

Date : 10-AUG-2023 08:48

Client ID: DFTPP

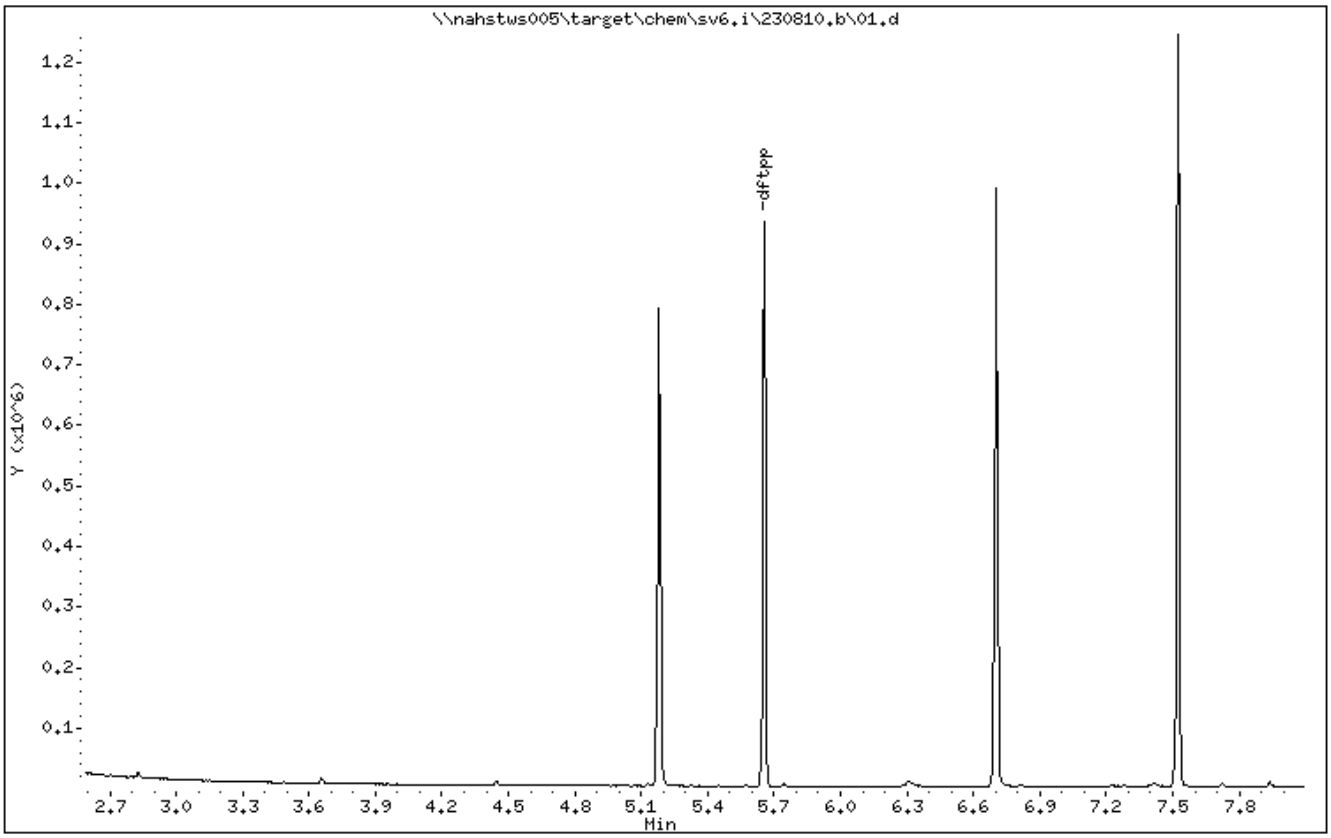
Instrument: SV6.i

Sample Info: DFTPP;DFTPP;3;;DFTPP

Operator: smith

Column phase: DB-5MS

Column diameter: 0.25



Data File : \\nahstws005\target\chem\sv6.i\230810.b\01.d
Inj Date : 10-AUG-2023 08:48
InstruID : SV6.i
LabSampID : DFTPP

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\04.D Page 1
Report Date: 10-Aug-2023 14:19

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\04.D
Lab Smp Id: 1 4DX-0.08
Inj Date : 10-AUG-2023 10:28
Operator : LG Inst ID: SV6.i
Smp Info : 1 4DX-0.08;;2
Misc Info : ;;0;1;
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 14:19 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7053

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.980	3.980	(1.000)	4289	0.10000	(aM)
* 45 Naphthalene-d8	136	5.117	5.117	(1.000)	16718	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.452	4.452	(0.870)	3680	0.08000	0.07245(M)
* 86 Acenaphthene-d10	164	6.818	6.818	(1.000)	8461	0.10000	
$ 69 2-Fluorobiphenyl	172	6.149	6.149	(0.902)	6670	0.08000	0.07709
* 126 Phenanthrene-d10	188	8.290	8.290	(1.000)	15818	0.10000	
* 182 Chrysene-d12	240	11.318	11.318	(1.000)	9952	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.941	9.941	(0.878)	5636	0.08000	0.07676(M)
* 198 Perylene-d12	264	13.536	13.536	(1.000)	8718	0.10000	
1 1,4-Dioxane	58	2.199	2.199	(0.553)	1039	0.08000	0.07140(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248681

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\04.D

Page 1

Date : 10-AUG-2023 10:28

Client ID:

Instrument: SV6.i

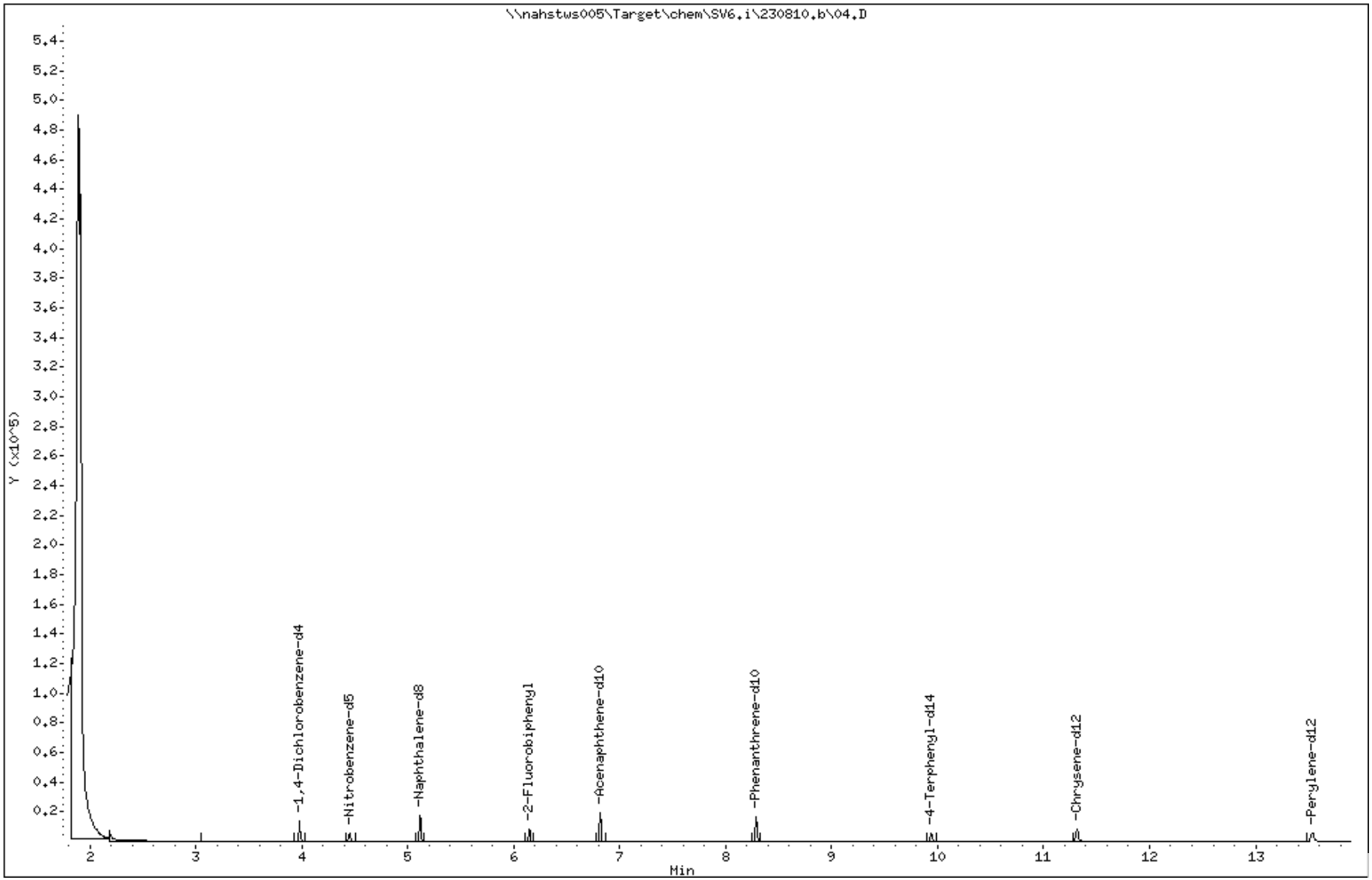
Sample Info: 1 4DX-0.08;;2

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



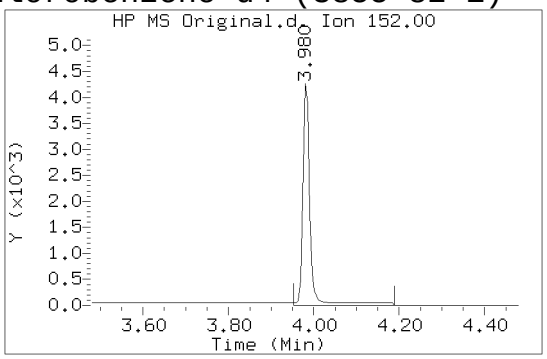
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\04.D
Inj Date : 10-AUG-2023 10:28
InstruID : SV6.i
LabSampID : 1 4DX-0.08

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

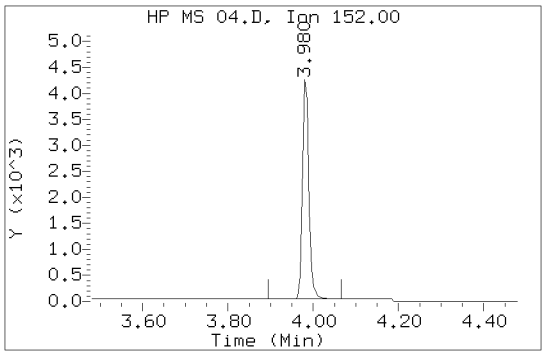
BEFORE

MASS
152
AREA
4973
HEIGHT
4263
10-Aug-2023
10:45
ALSHS
Server



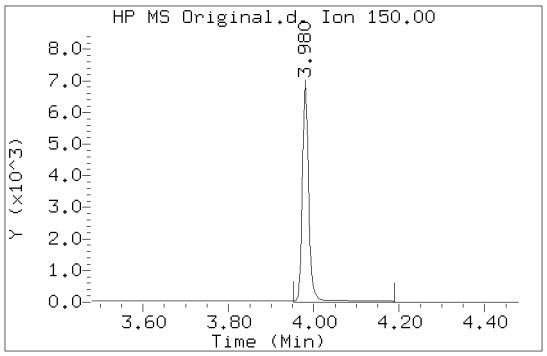
AFTER

MASS
152
AREA
4289
HEIGHT
4214
10-Aug-2023
14:19
ALSHS
S



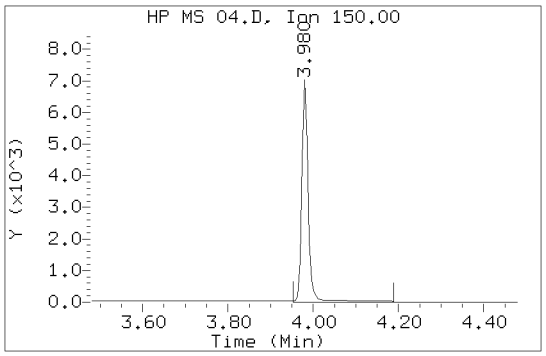
BEFORE

MASS
150
AREA
7449
HEIGHT
7030
10-Aug-2023
10:45
ALSHS
Server



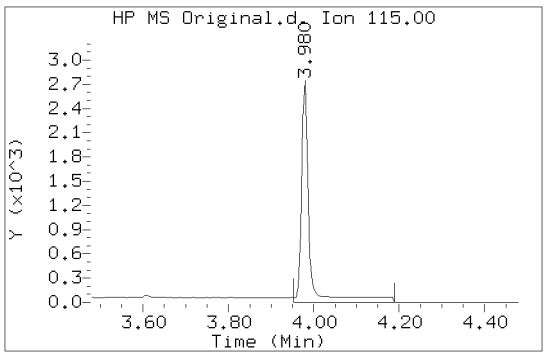
AFTER

MASS
150
AREA
7449
HEIGHT
7030
10-Aug-2023
14:19
ALSHS
S



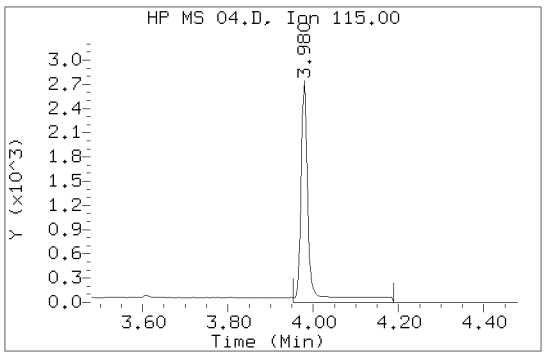
BEFORE

MASS
115
AREA
3533
HEIGHT
2744
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
115
AREA
3533
HEIGHT
2744
10-Aug-2023
14:19
ALSHS
S

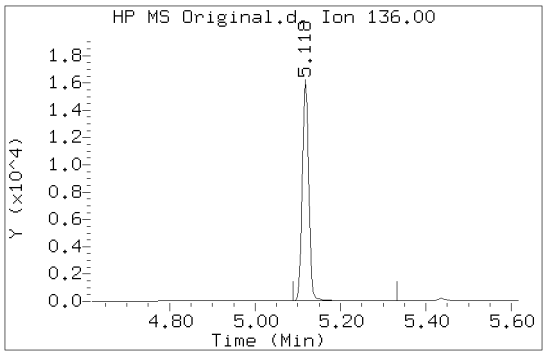


Naphthalene-d8 (1146-65-2)

Reason Code:

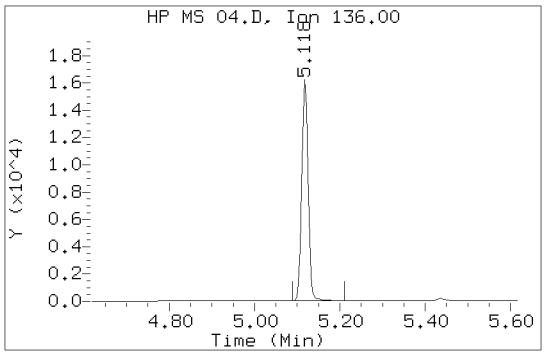
BEFORE

MASS
136
AREA
16932
HEIGHT
16206
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
136
AREA
16718
HEIGHT
16188
10-Aug-2023
14:19
ALSHS
S

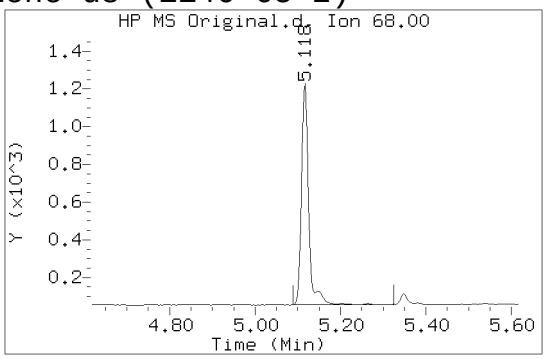


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\04.D
Inj Date : 10-AUG-2023 10:28
InstruID : SV6.i
LabSampID : 1 4DX-0.08

Naphthalene-d8 (1146-65-2)

BEFORE

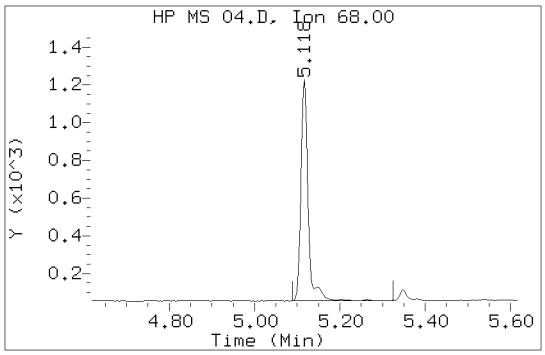
MASS
68
AREA
1371
HEIGHT
1172
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
68
AREA
1371
HEIGHT
1172
10-Aug-2023
14:19
ALSHS
S

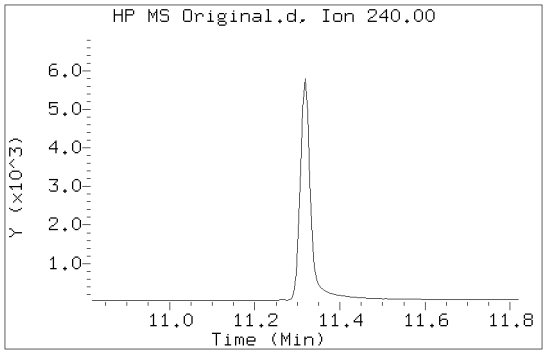
Reason Code:



Chrysene-d12 (1719-03-5)

BEFORE

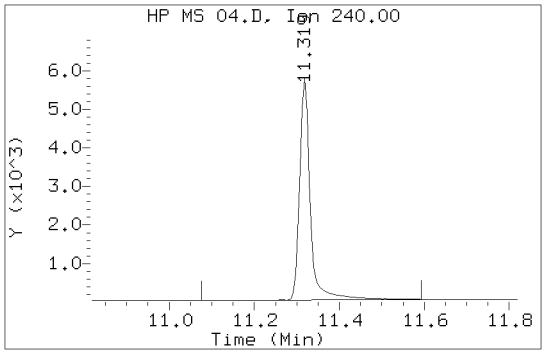
MASS
240
AREA
0
HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



AFTER

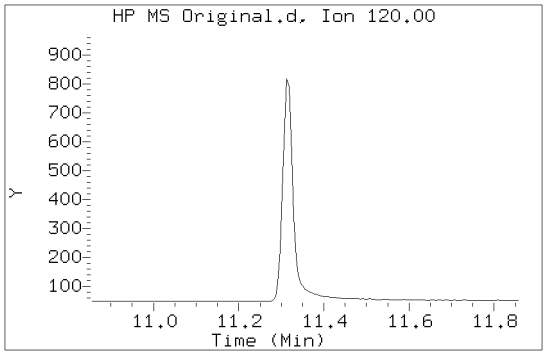
MASS
240
AREA
9952
HEIGHT
5745
10-Aug-2023
14:19
ALSHS
S

Reason Code:



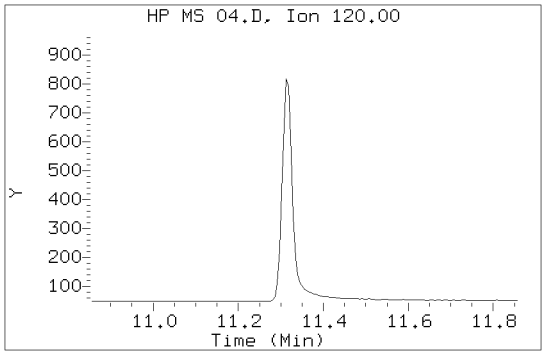
BEFORE

MASS
120
AREA
0
HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



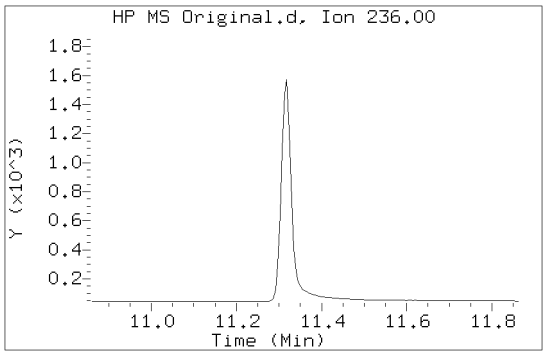
AFTER

MASS
120
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S



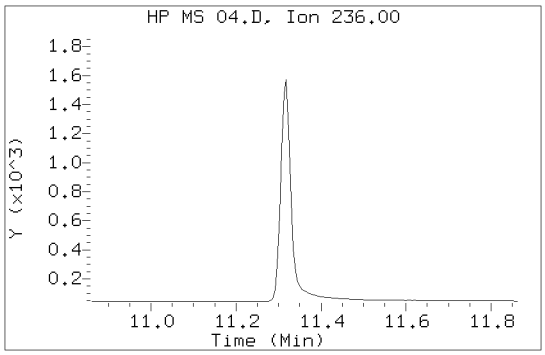
BEFORE

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S



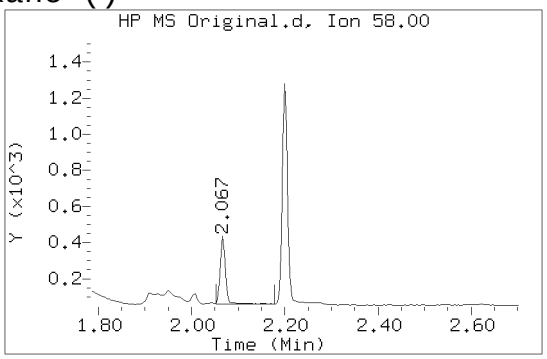
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\04.D
Inj Date : 10-AUG-2023 10:28
InstruID : SV6.i
LabSampID : 1 4DX-0.08

1,4-Dioxane ()

Reason Code:

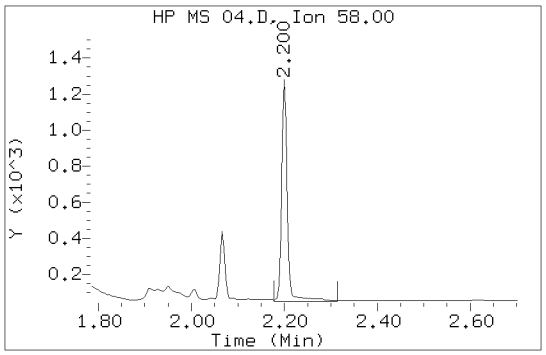
BEFORE

MASS
58
AREA
299
HEIGHT
378
10-Aug-2023
10:45
ALSHS
Server



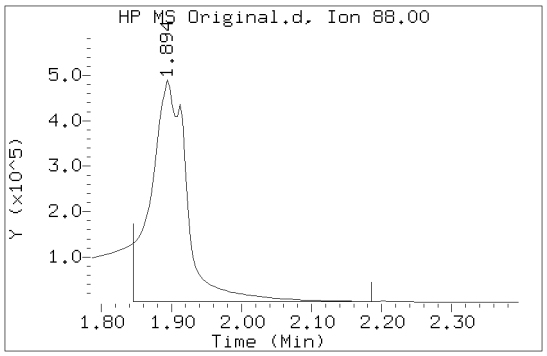
AFTER

MASS
58
AREA
1039
HEIGHT
1228
10-Aug-2023
14:19
ALSHS
S



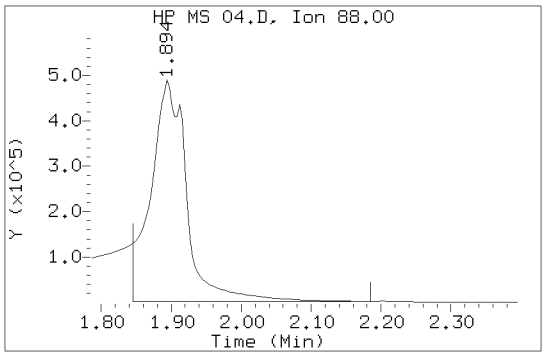
BEFORE

MASS
88
AREA
1754499
HEIGHT
487757
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
88
AREA
1754499
HEIGHT
487757
10-Aug-2023
14:19
ALSHS
S

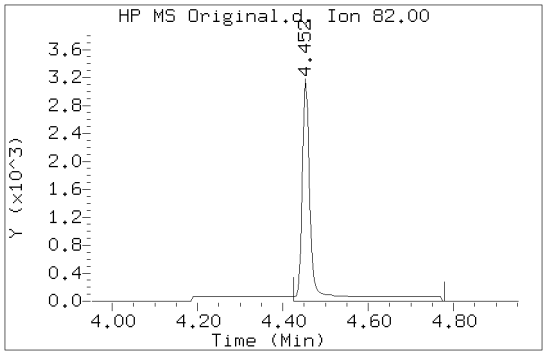


Nitrobenzene-d5 (4165-60-0)

Reason Code:

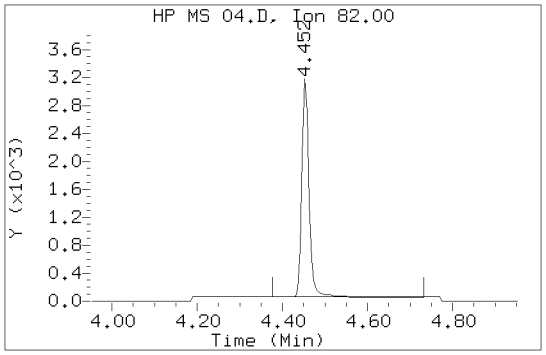
BEFORE

MASS
82
AREA
4891
HEIGHT
3181
10-Aug-2023
10:45
ALSHS
Server



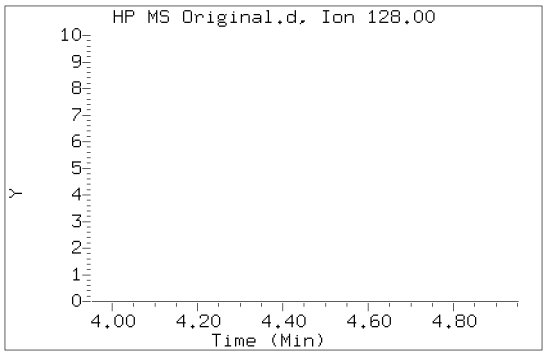
AFTER

MASS
82
AREA
3680
HEIGHT
3121
10-Aug-2023
14:19
ALSHS
S



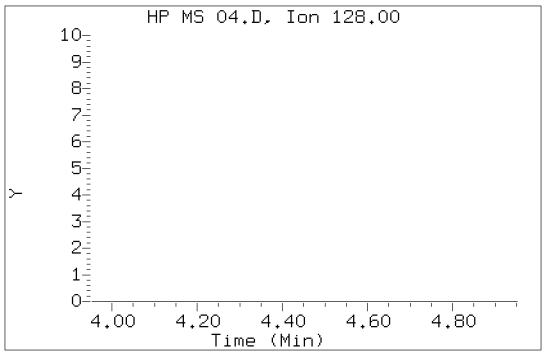
BEFORE

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S

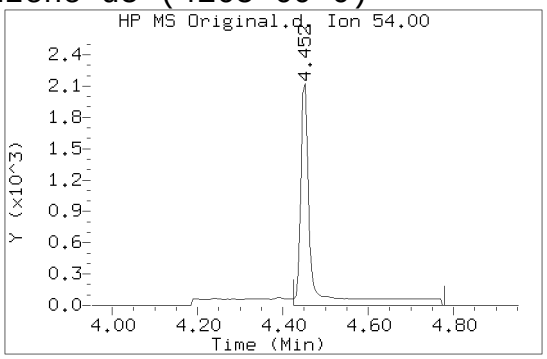


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\04.D
Inj Date : 10-AUG-2023 10:28
InstruID : SV6.i
LabSampID : 1 4DX-0.08

Nitrobenzene-d5 (4165-60-0)

BEFORE

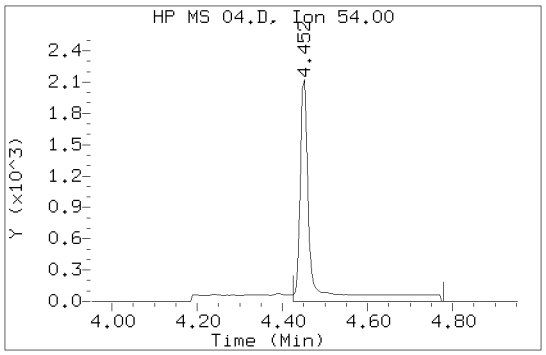
MASS
54
AREA
3740
HEIGHT
2123
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
54
AREA
3740
HEIGHT
2123
10-Aug-2023
14:19
ALSHS
S

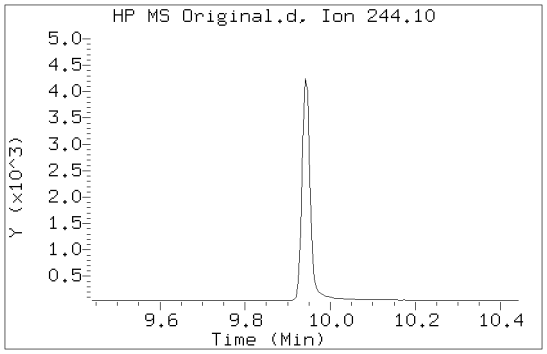
Reason Code:



4-Terphenyl-d14 (1718-51-0)

BEFORE

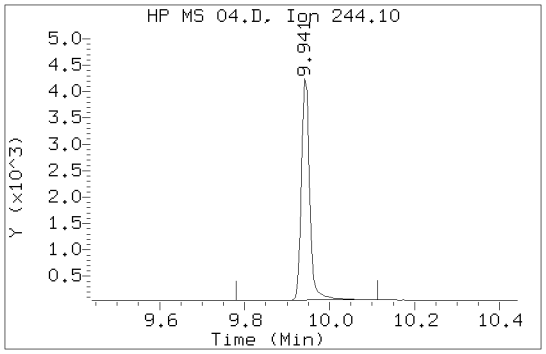
MASS
244.1
AREA
0
HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



AFTER

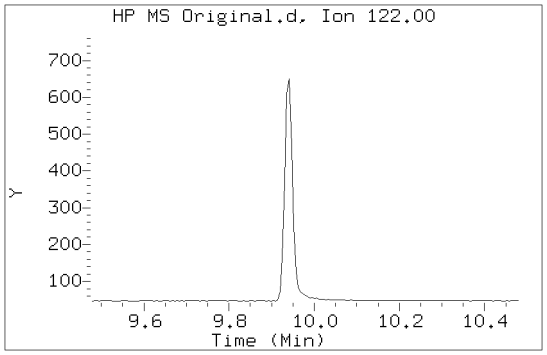
MASS
244.1
AREA
5636
HEIGHT
4195
10-Aug-2023
14:19
ALSHS
S

Reason Code:



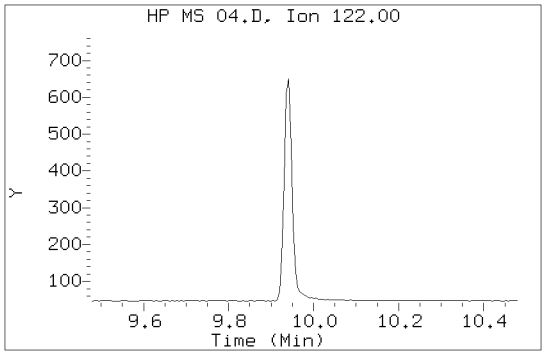
BEFORE

MASS
122
AREA
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HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



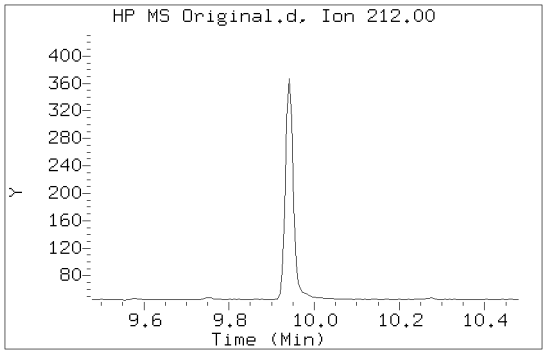
AFTER

MASS
122
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S



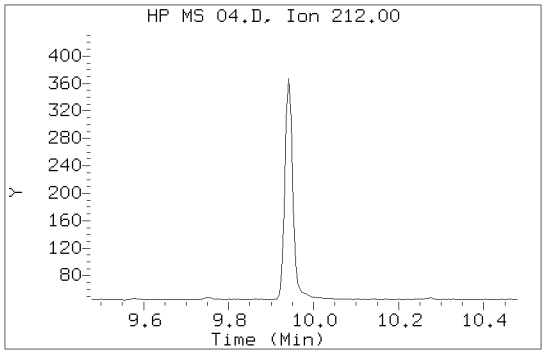
BEFORE

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
10:45
ALSHS
Server



AFTER

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S



Data File: \\nahstws005\Target\chem\SV6.i\230810.b\05.D Page 1
Report Date: 10-Aug-2023 14:21

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\05.D
Lab Smp Id: MBLK-198572 Client Smp ID: MBLK-198572
Inj Date : 10-AUG-2023 11:00
Operator : LG Inst ID: SV6.i
Smp Info : MBLK-198572;MBLK-198572;3;;BLANK
Misc Info : ;;0;1;
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 14:19 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7053

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.985	3.980	(1.000)	4291	0.10000	(a)
* 45 Naphthalene-d8	136	5.117	5.117	(1.000)	16595	0.10000	
$ 33 Nitrobenzene-d5	82	4.452	4.452	(0.870)	3895	0.07725	0.07725(M)
* 86 Acenaphthene-d10	164	6.818	6.818	(1.000)	8064	0.10000	
$ 69 2-Fluorobiphenyl	172	6.150	6.149	(0.902)	7373	0.08941	0.08941(M)
* 126 Phenanthrene-d10	188	8.290	8.290	(1.000)	14975	0.10000	
* 182 Chrysene-d12	240	11.318	11.318	(1.000)	11134	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.941	9.941	(0.878)	7729	0.09409	0.09409(M)
* 198 Perylene-d12	264	13.536	13.536	(1.000)	8136	0.10000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

01248687

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\05.D

Page 1

Date : 10-AUG-2023 11:00

Client ID: MBLK-198572

Instrument: SV6.i

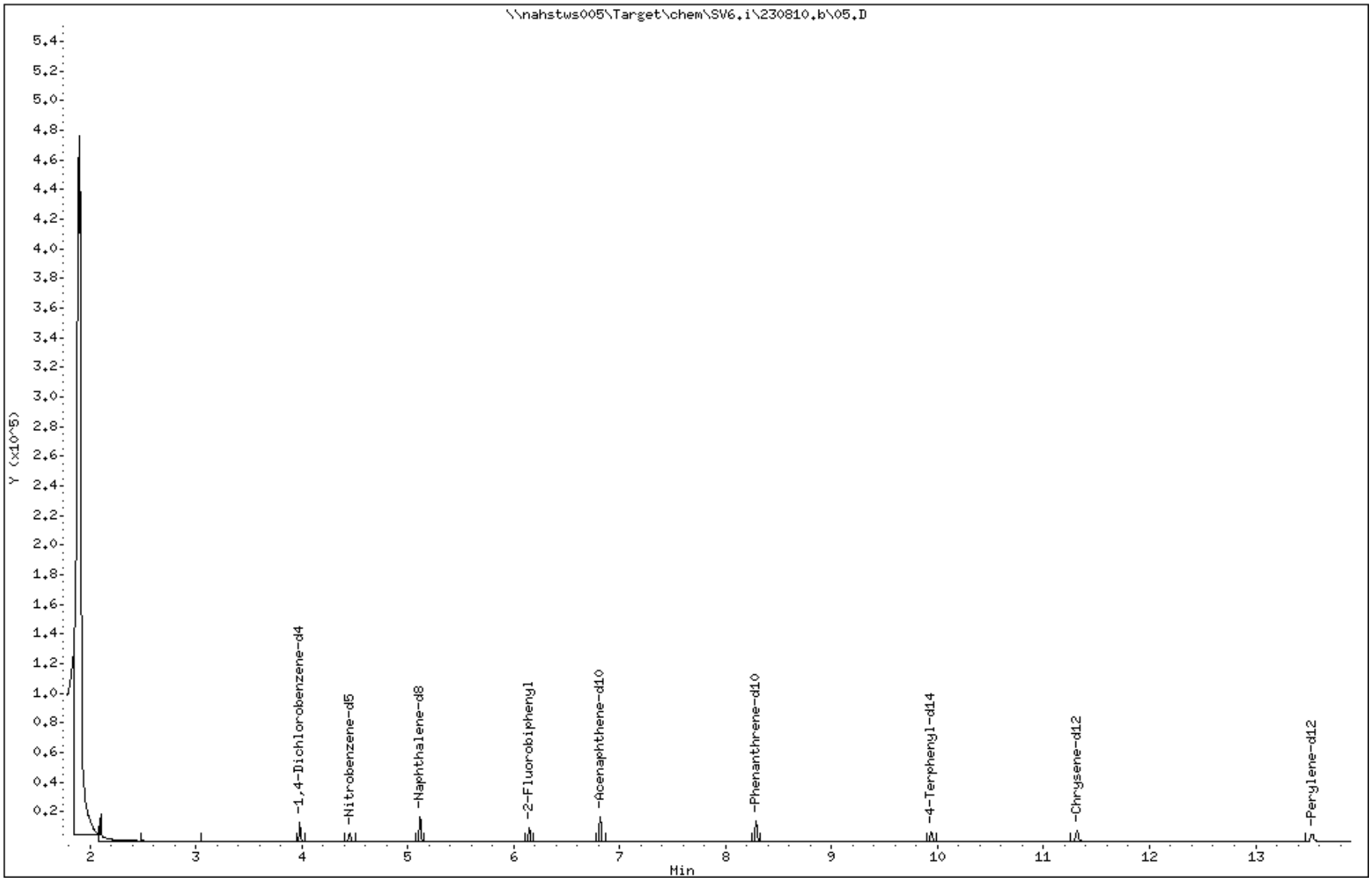
Sample Info: MBLK-198572;MBLK-198572;3;;BLANK

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



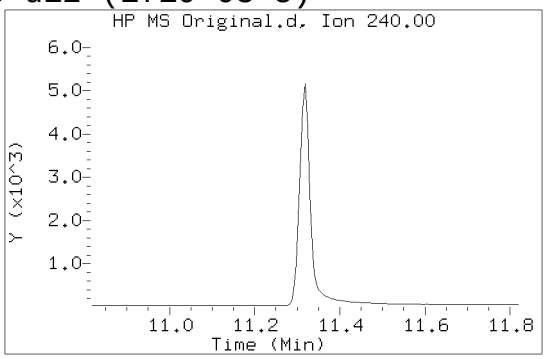
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\05.D
Inj Date : 10-AUG-2023 11:00
InstruID : SV6.i
LabSampID : MBLK-198572

Chrysene-d12 (1719-03-5)

Reason Code:

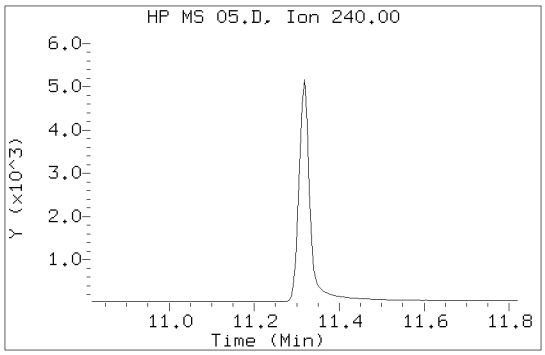
BEFORE

MASS
240
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



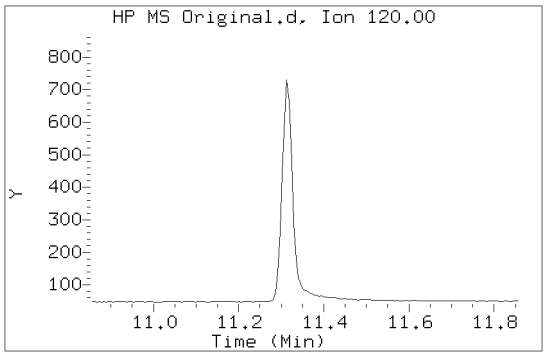
AFTER

MASS
240
AREA
11134
HEIGHT
5130
10-Aug-2023
14:21
ALSHS
S



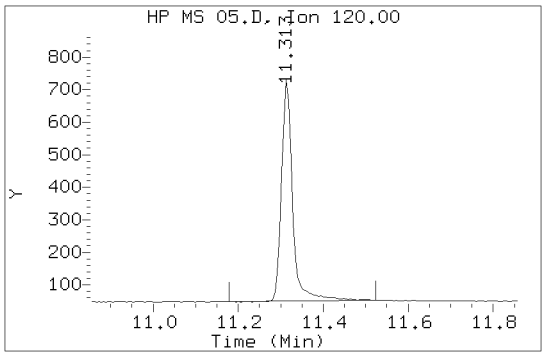
BEFORE

MASS
120
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



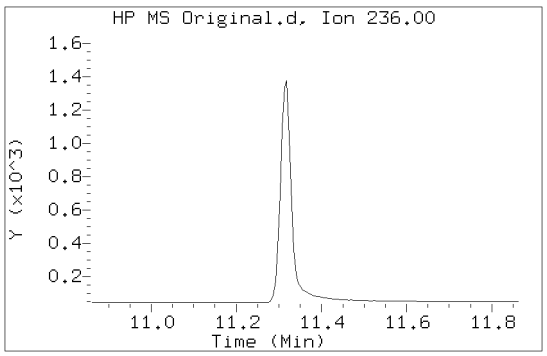
AFTER

MASS
120
AREA
1230
HEIGHT
680
10-Aug-2023
14:21
ALSHS
S



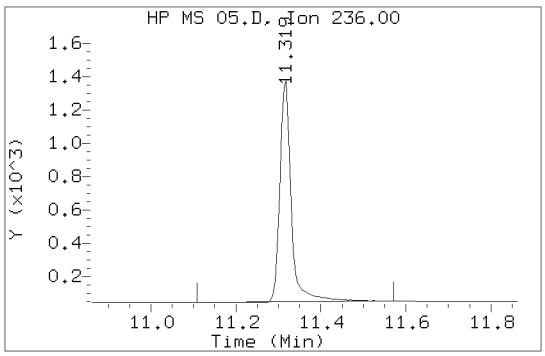
BEFORE

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



AFTER

MASS
236
AREA
2469
HEIGHT
1328
10-Aug-2023
14:21
ALSHS
S

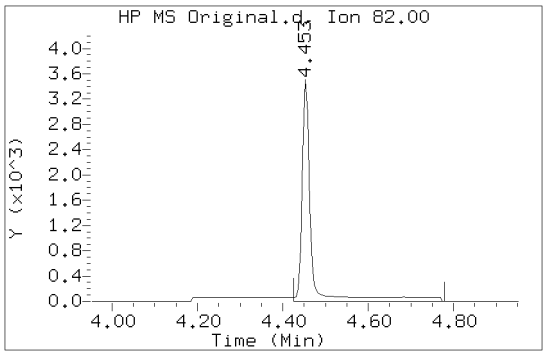


Nitrobenzene-d5 (4165-60-0)

Reason Code:

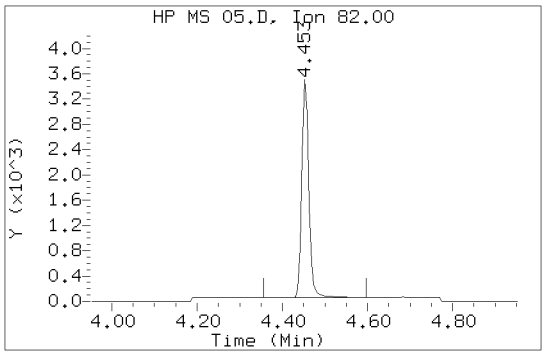
BEFORE

MASS
82
AREA
5154
HEIGHT
3507
10-Aug-2023
11:15
ALSHS
Server



AFTER

MASS
82
AREA
3895
HEIGHT
3446
10-Aug-2023
14:21
ALSHS
S



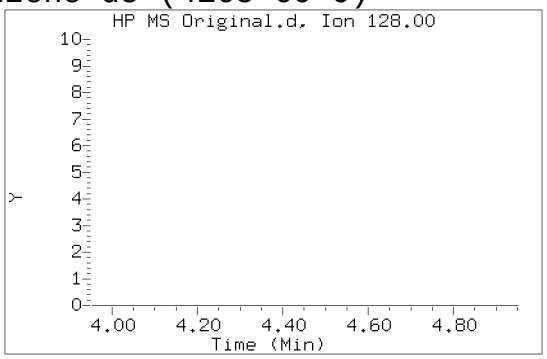
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\05.D
Inj Date : 10-AUG-2023 11:00
InstruID : SV6.i
LabSampID : MBLK-198572

Nitrobenzene-d5 (4165-60-0)

Reason Code:

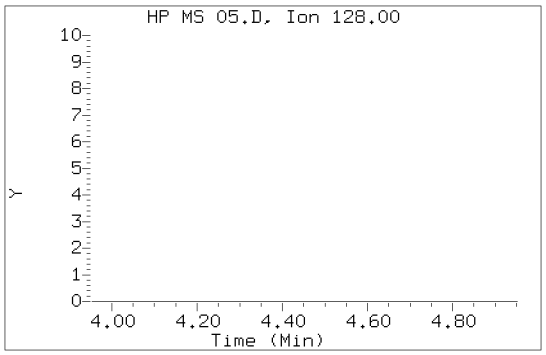
BEFORE

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



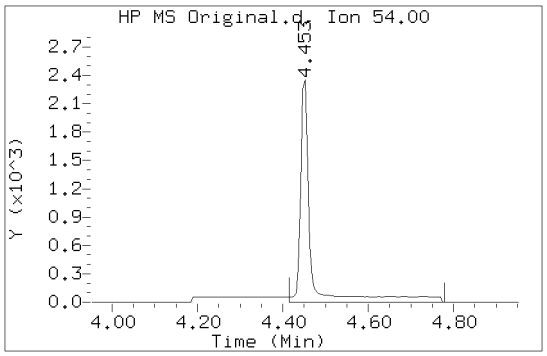
AFTER

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
14:21
ALSHS
S



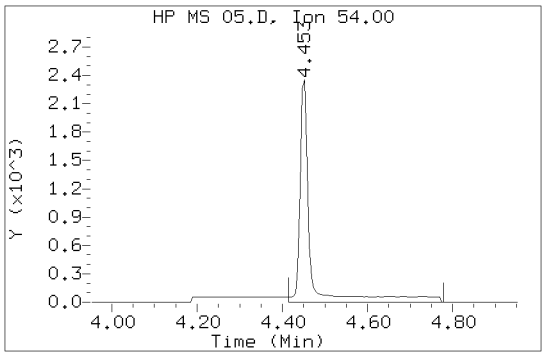
BEFORE

MASS
54
AREA
3922
HEIGHT
2352
10-Aug-2023
11:15
ALSHS
Server



AFTER

MASS
54
AREA
3922
HEIGHT
2352
10-Aug-2023
14:21
ALSHS
S

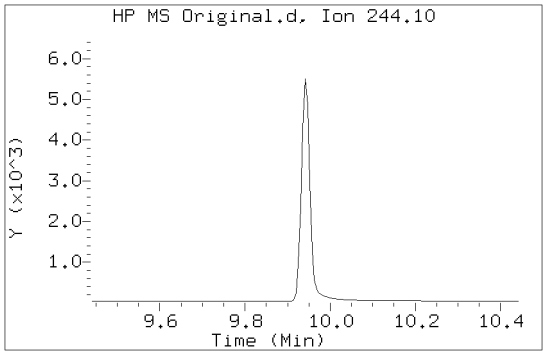


4-Terphenyl-d14 (1718-51-0)

Reason Code:

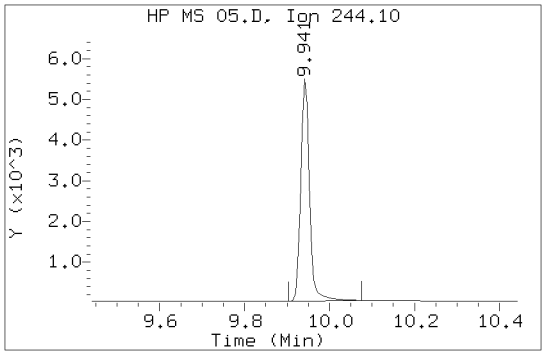
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



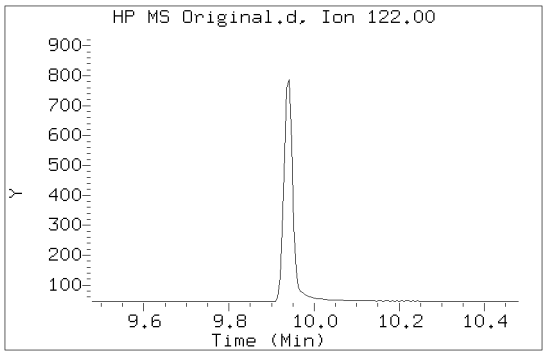
AFTER

MASS
244.1
AREA
7729
HEIGHT
5454
10-Aug-2023
14:21
ALSHS
S



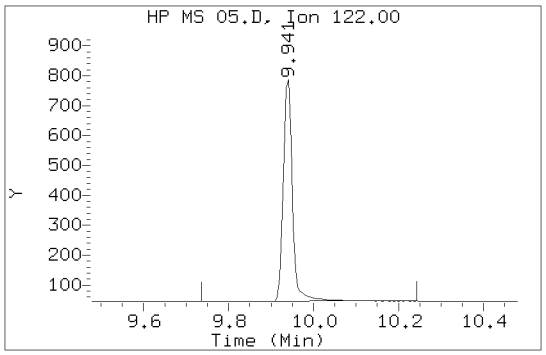
BEFORE

MASS
122
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



AFTER

MASS
122
AREA
1101
HEIGHT
740
10-Aug-2023
14:21
ALSHS
S

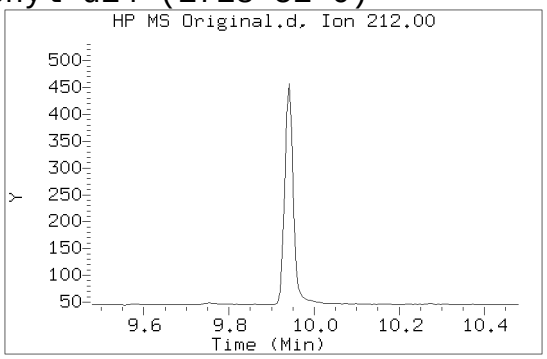


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\05.D
Inj Date : 10-AUG-2023 11:00
InstruID : SV6.i
LabSampID : MBLK-198572

4-Terphenyl-d14 (1718-51-0)

BEFORE

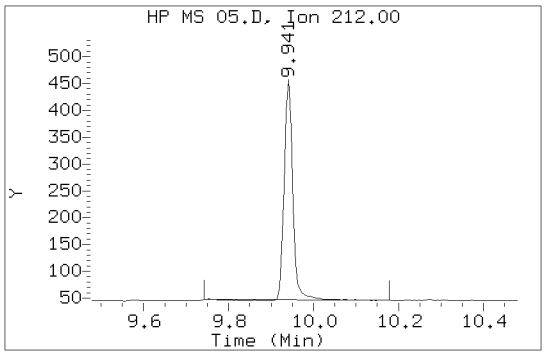
MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
11:15
ALSHS
Server



AFTER

MASS
212
AREA
560
HEIGHT
410
10-Aug-2023
14:21
ALSHS
S

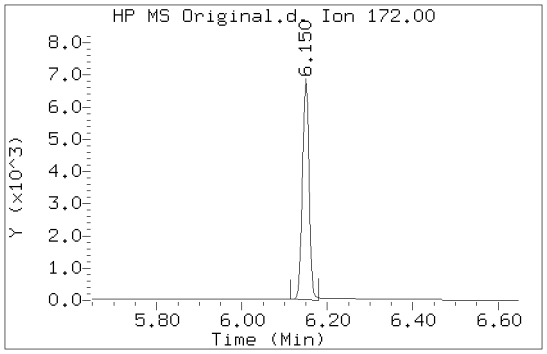
Reason Code:



2-Fluorobiphenyl (321-60-8)

BEFORE

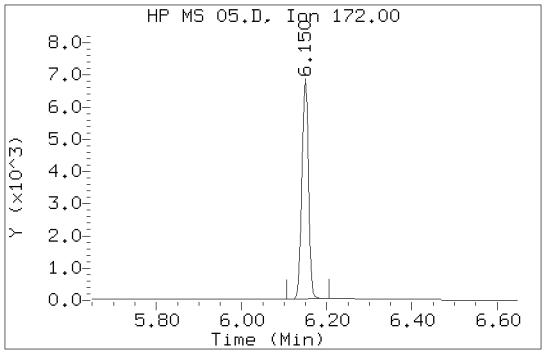
MASS
172
AREA
7481
HEIGHT
6862
10-Aug-2023
11:15
ALSHS
Server



AFTER

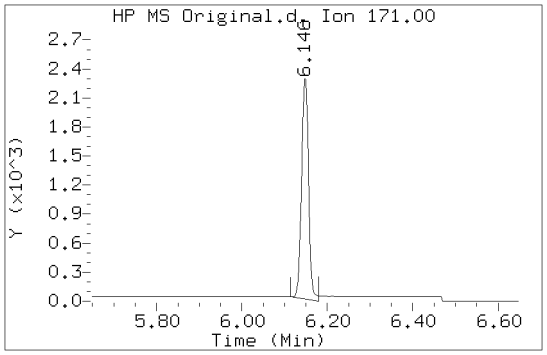
MASS
172
AREA
7373
HEIGHT
6831
10-Aug-2023
14:21
ALSHS
S

Reason Code:



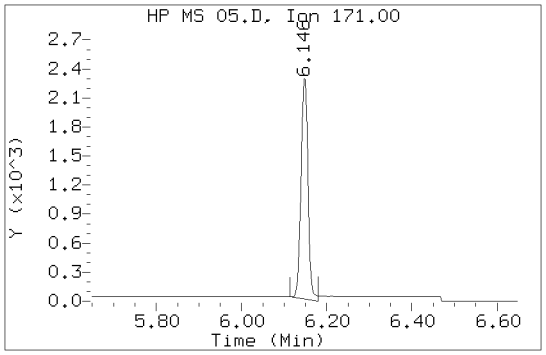
BEFORE

MASS
171
AREA
2611
HEIGHT
2274
10-Aug-2023
11:15
ALSHS
Server



AFTER

MASS
171
AREA
2611
HEIGHT
2274
10-Aug-2023
14:21
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\08.D
Lab Smp Id: HS23080101-01
Inj Date : 10-AUG-2023 11:54
Operator : LG Inst ID: SV6.i
Smp Info : HS23080101-01
Misc Info : ;;0;1;
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 14:19 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7053

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.980	3.980	(1.000)	4039	0.10000	(aM)
* 45 Naphthalene-d8	136	5.117	5.117	(1.000)	23339	0.10000	(M)
$ 33 Nitrobenzene-d5	82	4.452	4.452	(0.870)	4597	0.06483	0.06483(Q)
* 86 Acenaphthene-d10	164	6.813	6.818	(1.000)	9416	0.10000	
$ 69 2-Fluorobiphenyl	172	6.146	6.149	(0.902)	9715	0.10090	0.1009(M)
* 126 Phenanthrene-d10	188	8.284	8.290	(1.000)	17582	0.10000	
* 182 Chrysene-d12	240	11.308	11.318	(1.000)	18185	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.930	9.941	(0.878)	11080	0.08259	0.08259(M)
* 198 Perylene-d12	264	13.526	13.536	(1.000)	10516	0.10000	
1 1,4-Dioxane	58	2.232	2.199	(0.561)	11663	0.85105	0.8510(AQH)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

01248693

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\08.D

Date : 10-AUG-2023 11:54

Client ID:

Instrument: SV6.i

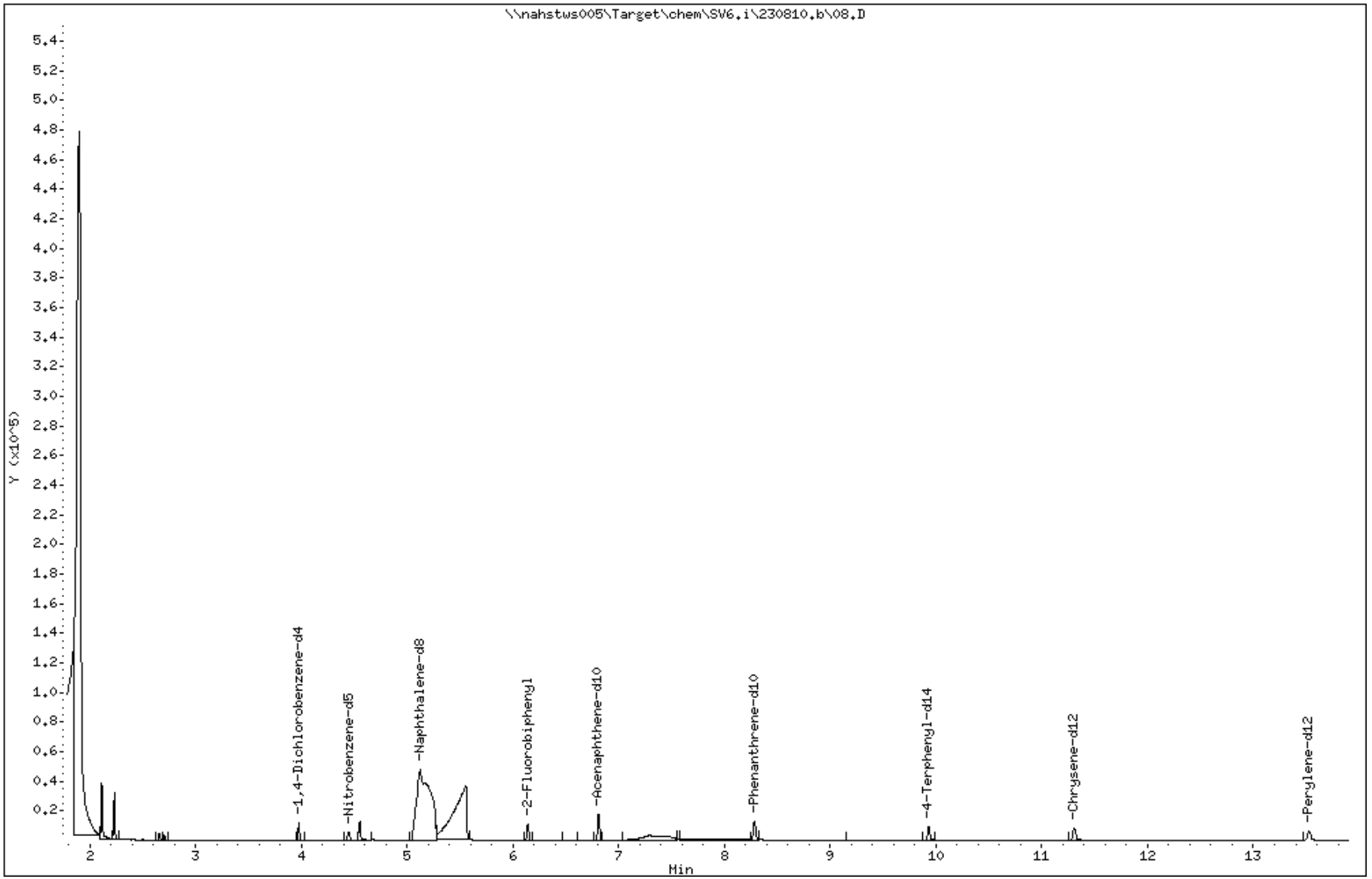
Sample Info: HS23080101-01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\nahstws005\Target\chem\SV6.i\230810.b\08.D

Date : 10-AUG-2023 11:54

Client ID:

Instrument: SV6.i

Sample Info: HS23080101-01

Purge Volume: 1000.0

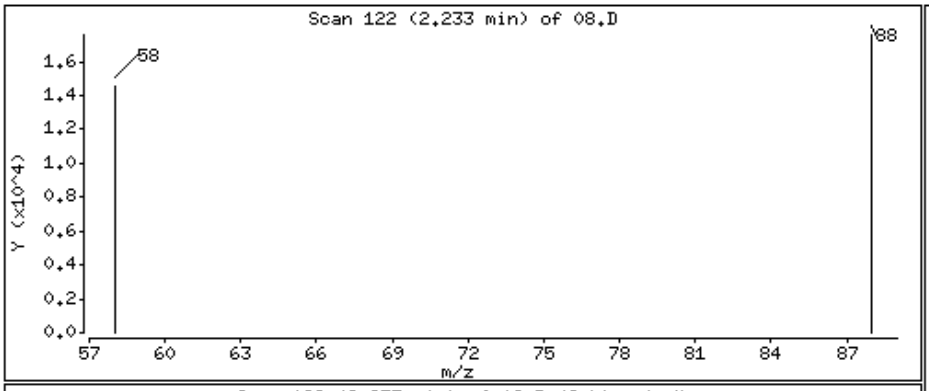
Operator: LG

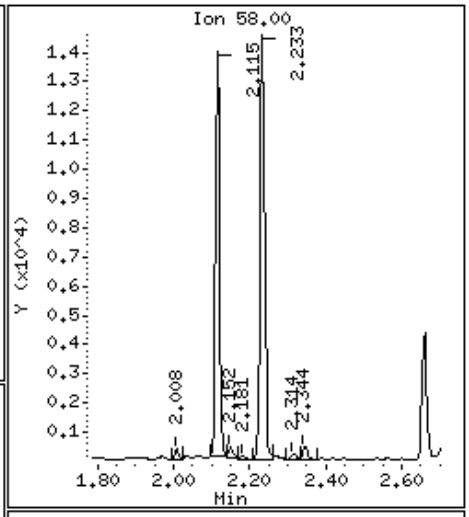
Column phase: RTX-5SIL MS

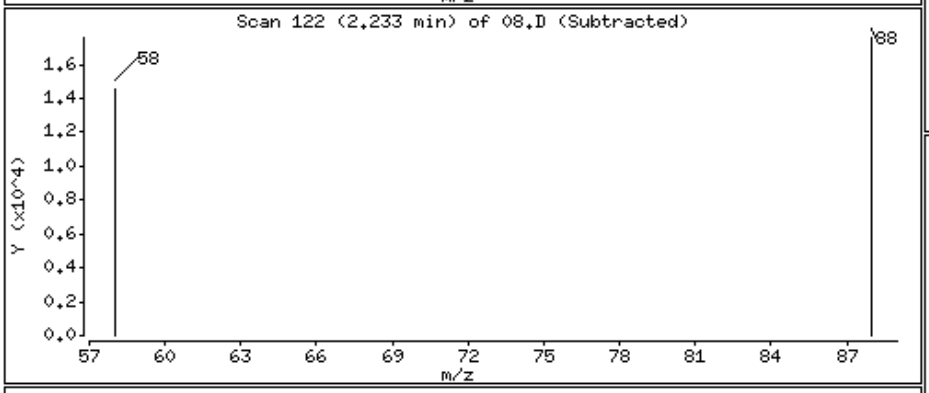
Column diameter: 0.28

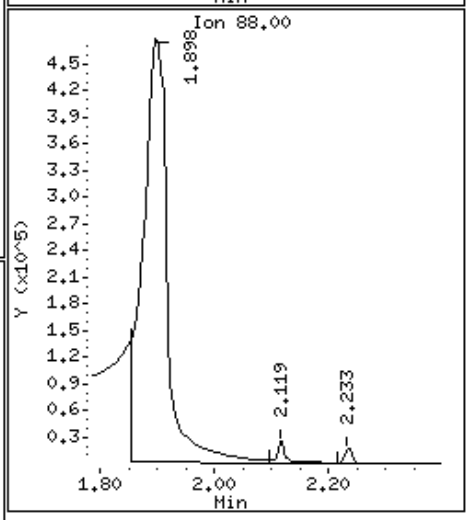
1 1,4-Dioxane

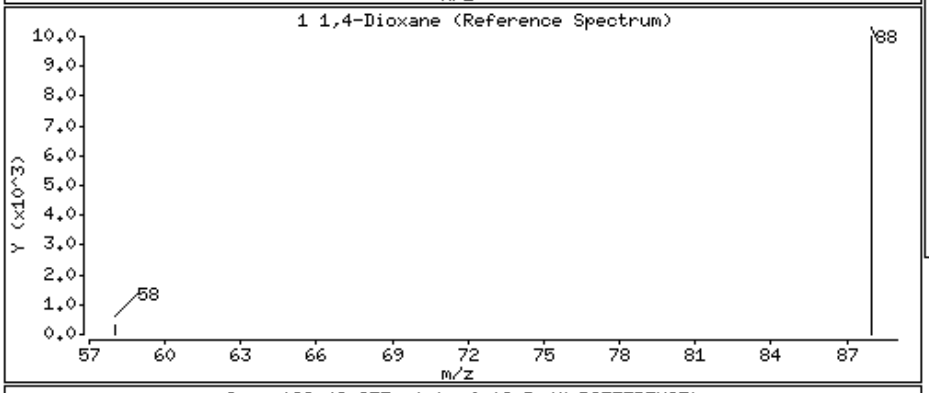
Concentration: 0.8510 ug/L

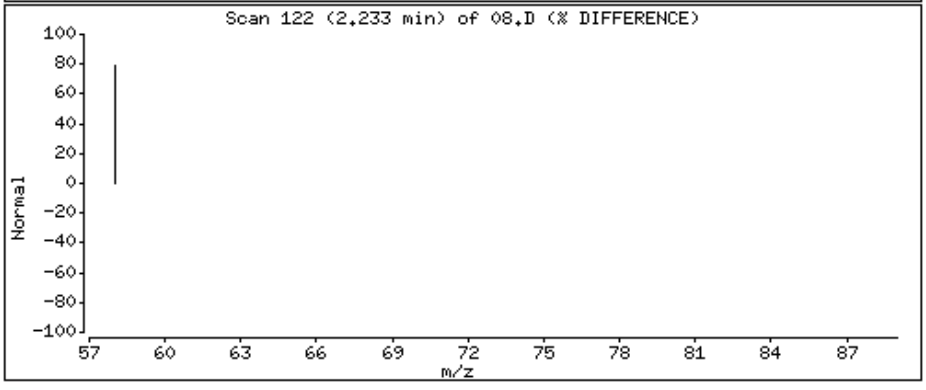












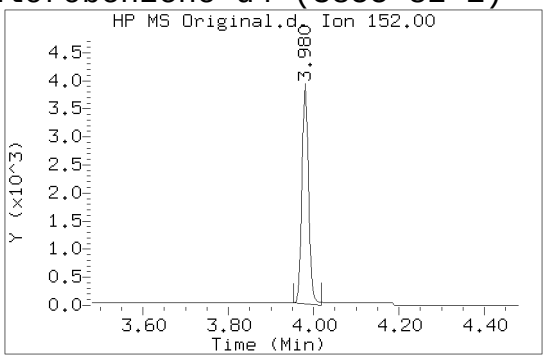
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\08.D
Inj Date : 10-AUG-2023 11:54
InstruID : SV6.i
LabSampID : HS23080101-01

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

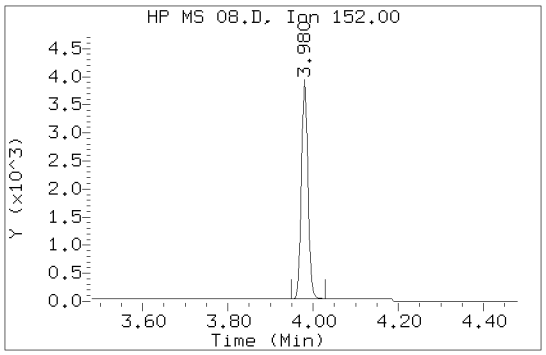
BEFORE

MASS
152
AREA
4143
HEIGHT
3919
10-Aug-2023
12:10
ALSHS
Server



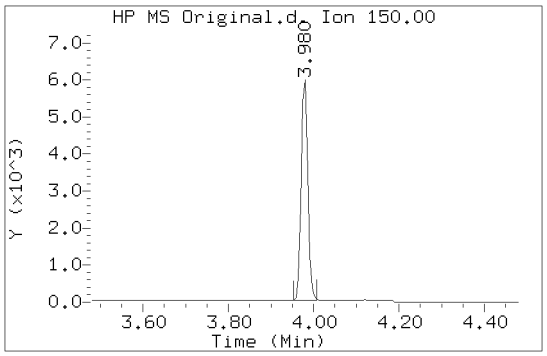
AFTER

MASS
152
AREA
4039
HEIGHT
3898
10-Aug-2023
14:19
ALSHS
S



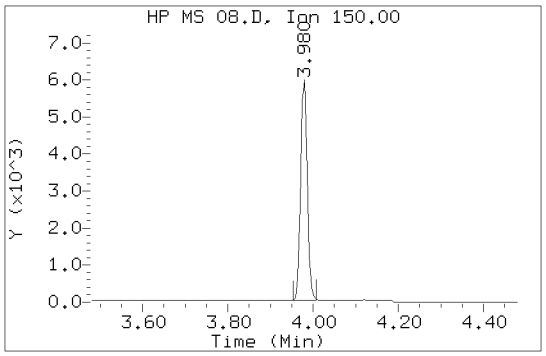
BEFORE

MASS
150
AREA
6351
HEIGHT
5951
10-Aug-2023
12:10
ALSHS
Server



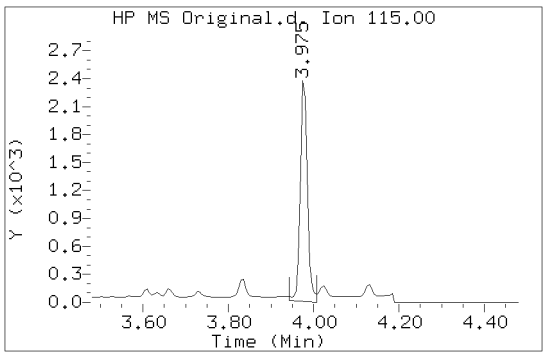
AFTER

MASS
150
AREA
6351
HEIGHT
5951
10-Aug-2023
14:19
ALSHS
S



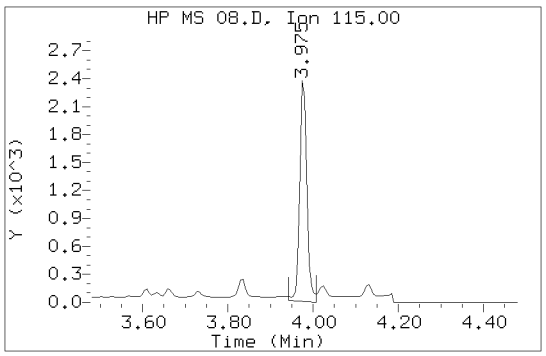
BEFORE

MASS
115
AREA
2741
HEIGHT
2369
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
115
AREA
2741
HEIGHT
2369
10-Aug-2023
14:19
ALSHS
S

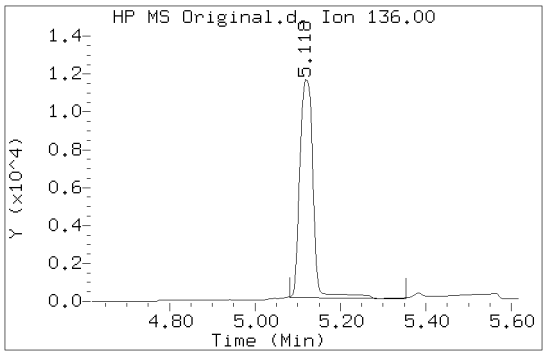


Naphthalene-d8 (1146-65-2)

Reason Code:

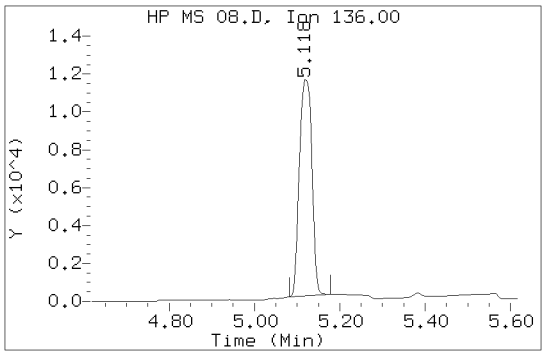
BEFORE

MASS
136
AREA
25171
HEIGHT
11512
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
136
AREA
23339
HEIGHT
11423
10-Aug-2023
14:19
ALSHS
S

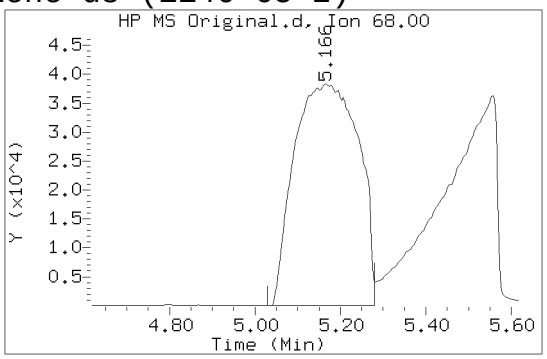


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\08.D
Inj Date : 10-AUG-2023 11:54
InstruID : SV6.i
LabSampID : HS23080101-01

Naphthalene-d8 (1146-65-2)

BEFORE

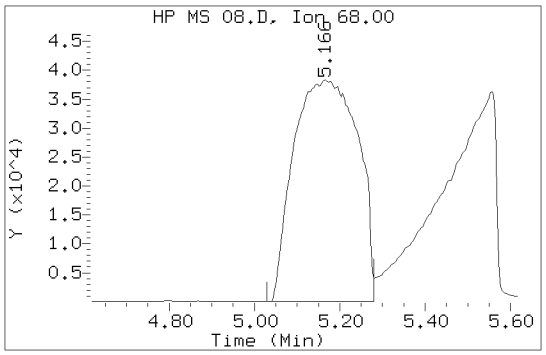
MASS
68
AREA
400048
HEIGHT
38287
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
68
AREA
400048
HEIGHT
38287
10-Aug-2023
14:19
ALSHS
S

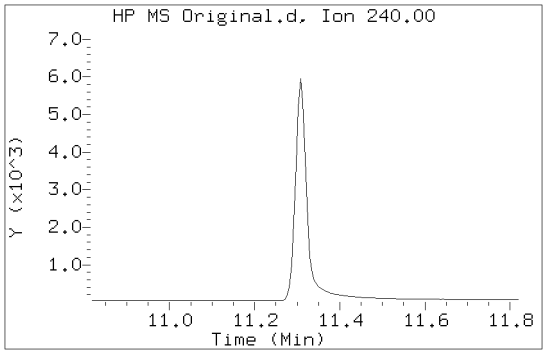
Reason Code:



Chrysene-d12 (1719-03-5)

BEFORE

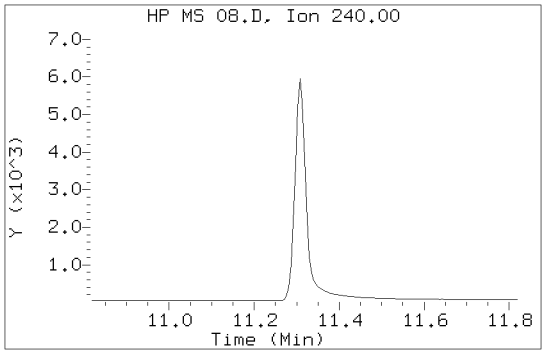
MASS
240
AREA
0
HEIGHT
0
10-Aug-2023
12:10
ALSHS
Server



AFTER

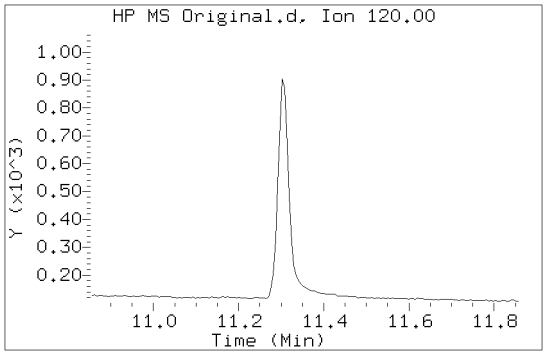
MASS
240
AREA
18185
HEIGHT
5954
10-Aug-2023
14:19
ALSHS
S

Reason Code:



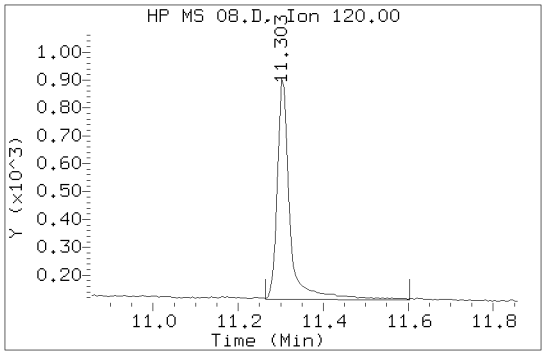
BEFORE

MASS
120
AREA
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HEIGHT
0
10-Aug-2023
12:10
ALSHS
Server



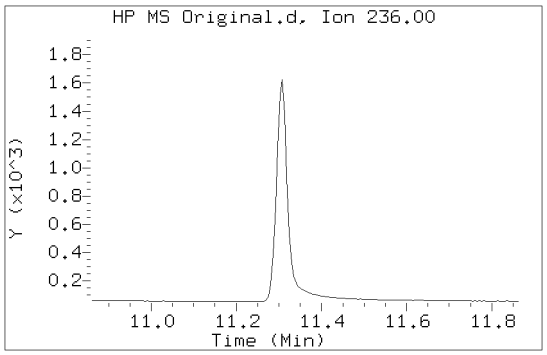
AFTER

MASS
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AREA
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HEIGHT
789
10-Aug-2023
14:19
ALSHS
S



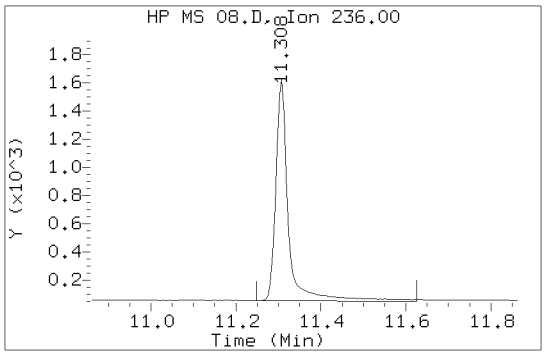
BEFORE

MASS
236
AREA
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HEIGHT
0
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
236
AREA
3276
HEIGHT
1571
10-Aug-2023
14:19
ALSHS
S



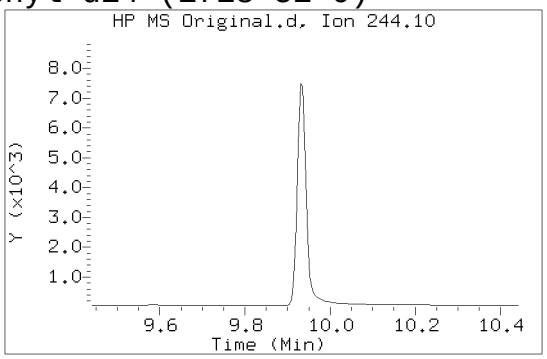
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Inj Date : 10-AUG-2023 11:54
InstruID : SV6.i
LabSampID : HS23080101-01

4-Terphenyl-d14 (1718-51-0)

Reason Code:

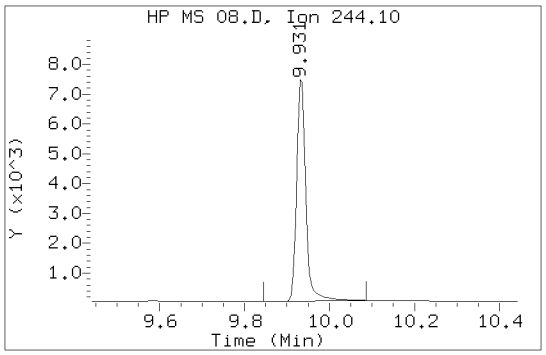
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
10-Aug-2023
12:10
ALSHS
Server



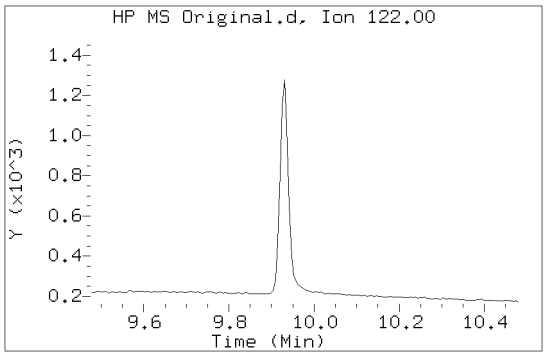
AFTER

MASS
244.1
AREA
11080
HEIGHT
7418
10-Aug-2023
14:19
ALSHS
S



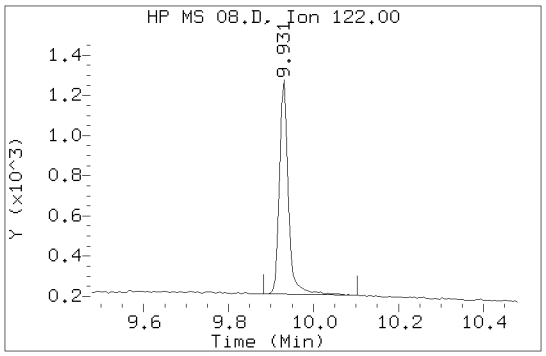
BEFORE

MASS
122
AREA
0
HEIGHT
0
10-Aug-2023
12:10
ALSHS
Server



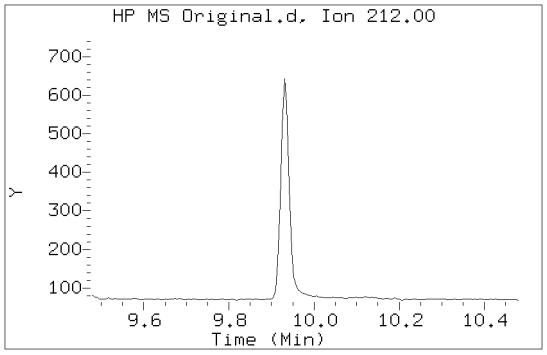
AFTER

MASS
122
AREA
1560
HEIGHT
1064
10-Aug-2023
14:19
ALSHS
S



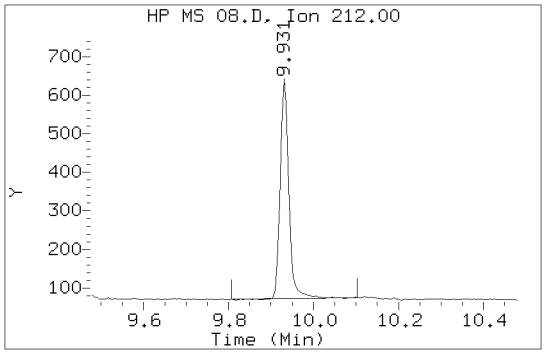
BEFORE

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
212
AREA
798
HEIGHT
570
10-Aug-2023
14:19
ALSHS
S

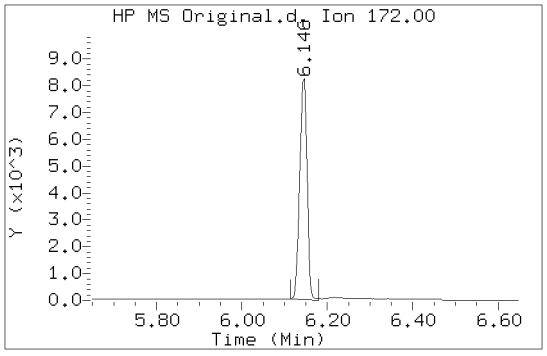


2-Fluorobiphenyl (321-60-8)

Reason Code:

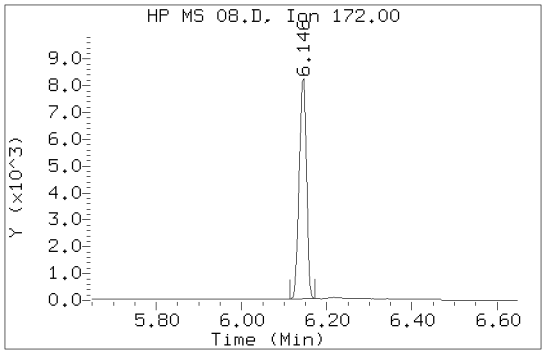
BEFORE

MASS
172
AREA
9862
HEIGHT
8238
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
172
AREA
9715
HEIGHT
8202
10-Aug-2023
14:19
ALSHS
S



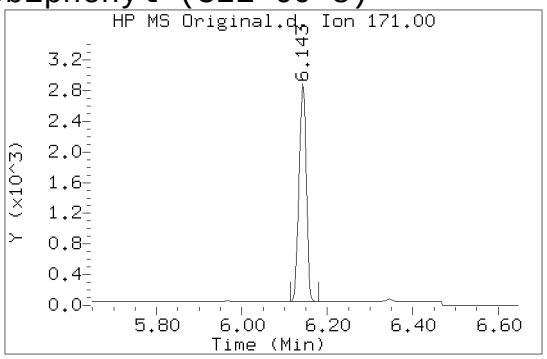
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\08.D
Inj Date : 10-AUG-2023 11:54
InstruID : SV6.i
LabSampID : HS23080101-01

2-Fluorobiphenyl (321-60-8)

Reason Code:

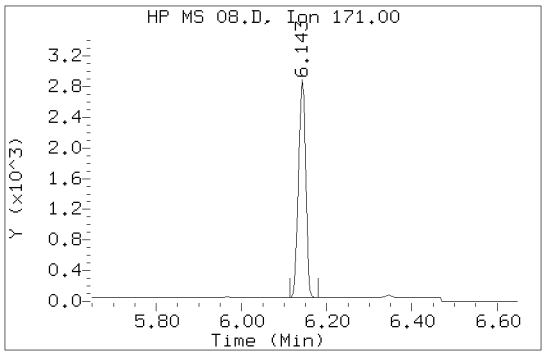
BEFORE

MASS
171
AREA
3312
HEIGHT
2840
10-Aug-2023
12:10
ALSHS
Server



AFTER

MASS
171
AREA
3312
HEIGHT
2840
10-Aug-2023
14:19
ALSHS
S



Data File: \\nahstws005\Target\chem\SV6.i\230810.b\09.D Page 1
Report Date: 10-Aug-2023 14:21

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\09.D
Lab Smp Id: LCS-198572 Client Smp ID: LCS-198572
Inj Date : 10-AUG-2023 12:12
Operator : LG Inst ID: SV6.i
Smp Info : LCS-198572;LCS-198572;3;;LCS
Misc Info : ;;0;1;
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 14:19 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7053

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.974	3.980	(1.000)	3449	0.10000	(aM)
* 45 Naphthalene-d8	136	5.110	5.117	(1.000)	13610	0.10000	
$ 33 Nitrobenzene-d5	82	4.447	4.452	(0.870)	3292	0.07961	0.07961(M)
* 86 Acenaphthene-d10	164	6.813	6.818	(1.000)	7012	0.10000	
$ 69 2-Fluorobiphenyl	172	6.142	6.149	(0.902)	7086	0.09882	0.09882(M)
* 126 Phenanthrene-d10	188	8.279	8.290	(1.000)	13282	0.10000	
* 182 Chrysene-d12	240	11.307	11.318	(1.000)	10041	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.935	9.941	(0.879)	6543	0.08833	0.08832(M)
* 198 Perylene-d12	264	13.531	13.536	(1.000)	8809	0.10000	
1 1,4-Dioxane	58	2.199	2.199	(0.553)	654	0.05589	0.05588(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248700

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\09.D

Date : 10-AUG-2023 12:12

Client ID: LCS-198572

Instrument: SV6.i

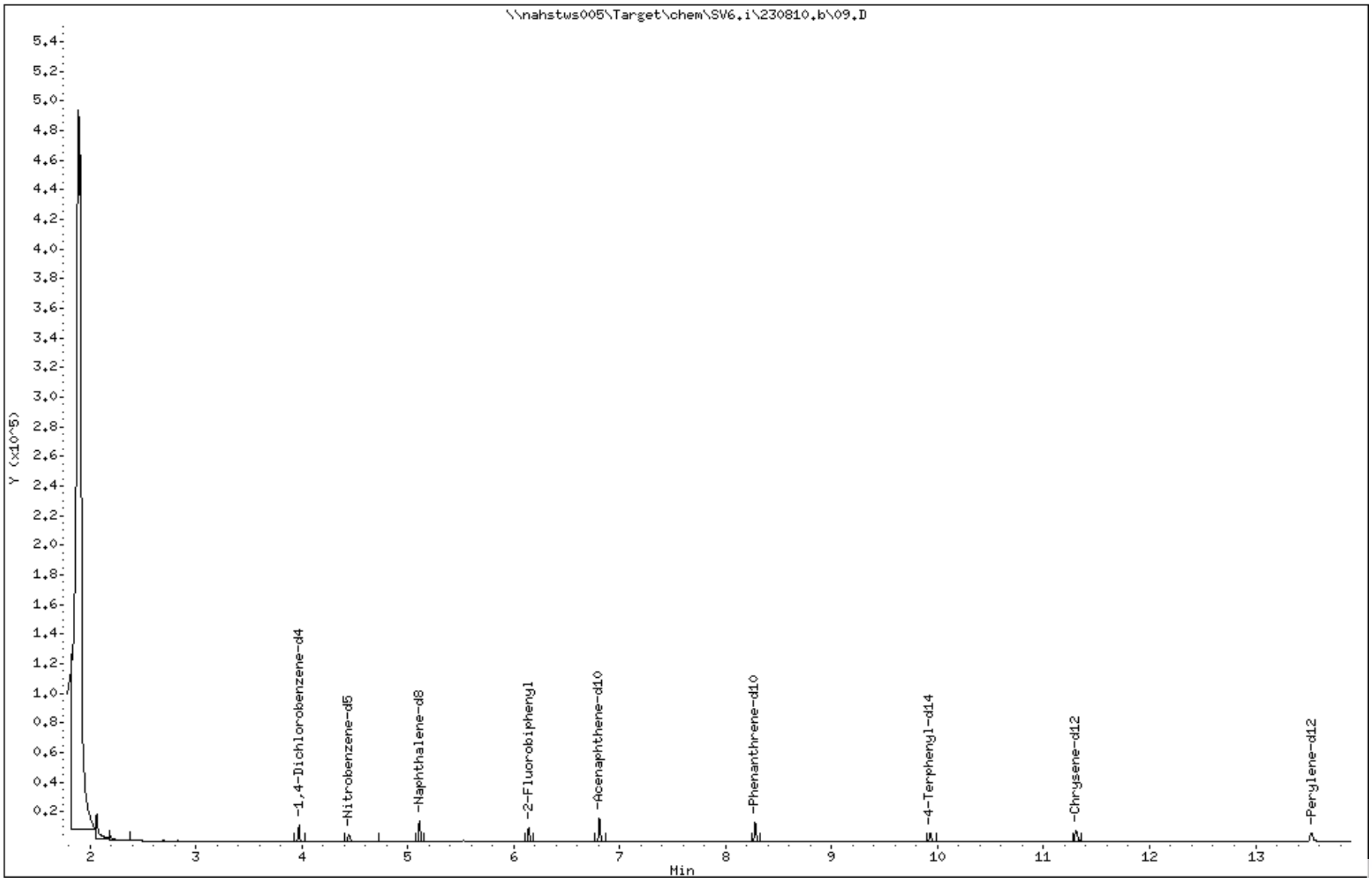
Sample Info: LCS-198572;LCS-198572;3;;LCS

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



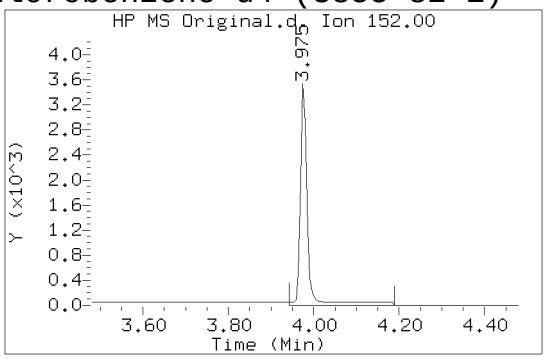
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\09.D
Inj Date : 10-AUG-2023 12:12
InstruID : SV6.i
LabSampID : LCS-198572

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

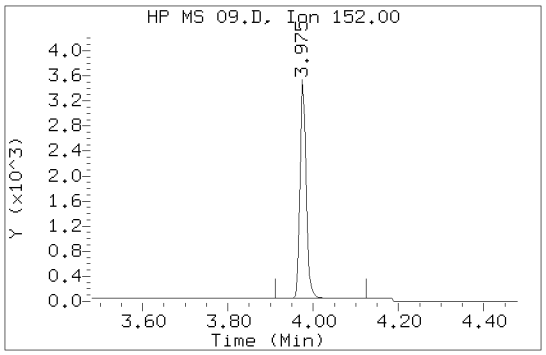
BEFORE

MASS
152
AREA
4155
HEIGHT
3538
10-Aug-2023
12:28
ALSHS
Server



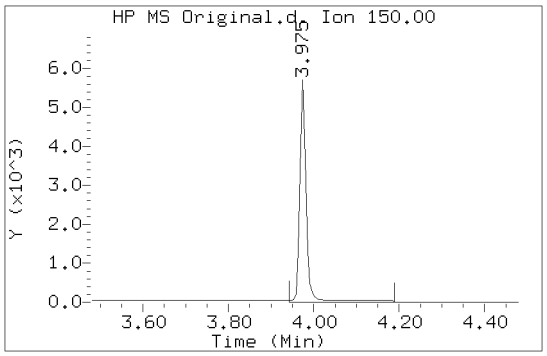
AFTER

MASS
152
AREA
3449
HEIGHT
3490
10-Aug-2023
14:19
ALSHS
S



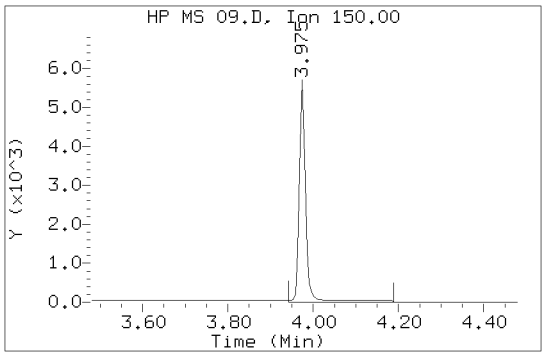
BEFORE

MASS
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AREA
6164
HEIGHT
5707
10-Aug-2023
12:28
ALSHS
Server



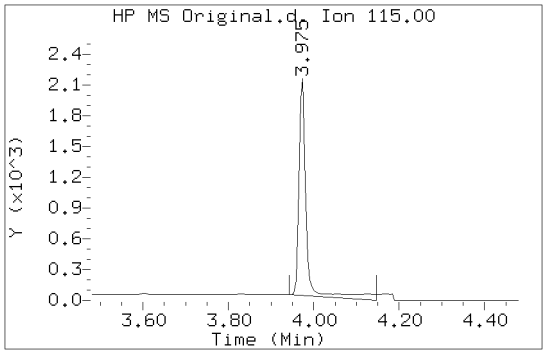
AFTER

MASS
150
AREA
6164
HEIGHT
5707
10-Aug-2023
14:19
ALSHS
S



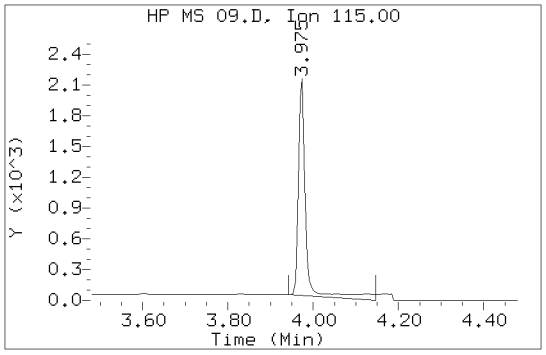
BEFORE

MASS
115
AREA
2534
HEIGHT
2115
10-Aug-2023
12:28
ALSHS
Server



AFTER

MASS
115
AREA
2534
HEIGHT
2115
10-Aug-2023
14:19
ALSHS
S

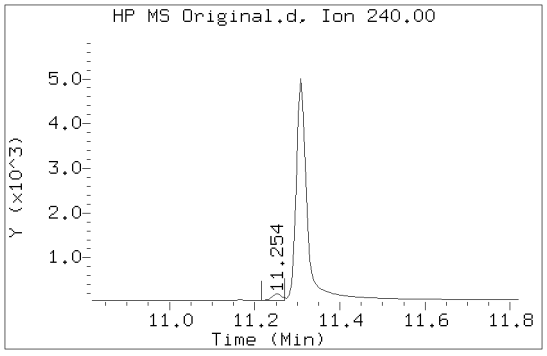


Chrysene-d12 (1719-03-5)

Reason Code:

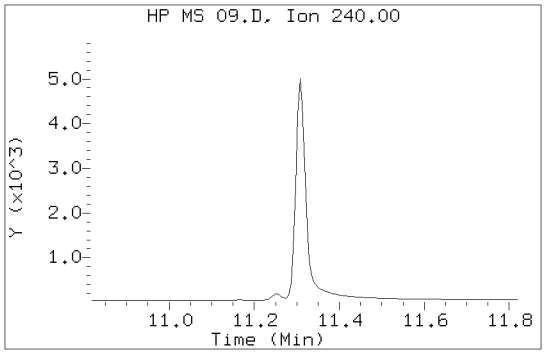
BEFORE

MASS
240
AREA
220
HEIGHT
142
10-Aug-2023
12:28
ALSHS
Server



AFTER

MASS
240
AREA
10041
HEIGHT
4960
10-Aug-2023
14:19
ALSHS
S



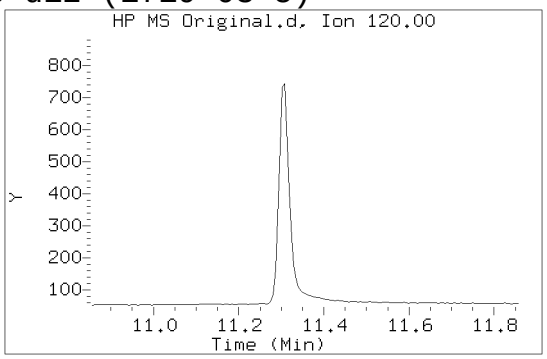
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\09.D
Inj Date : 10-AUG-2023 12:12
InstruID : SV6.i
LabSampID : LCS-198572

Chrysene-d12 (1719-03-5)

Reason Code:

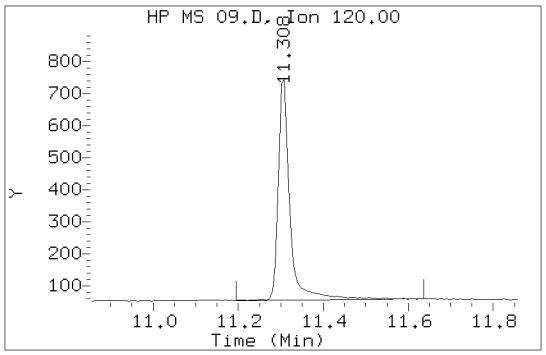
BEFORE

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120
AREA
0
HEIGHT
0
10-Aug-2023
12:28
ALSHS
Server



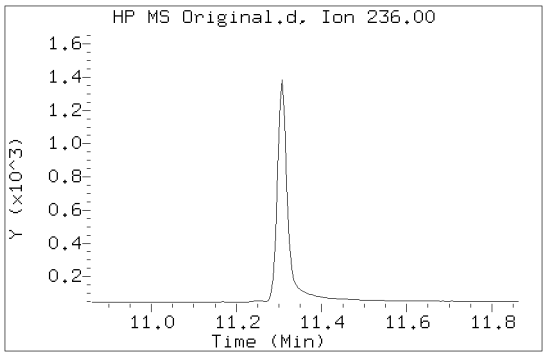
AFTER

MASS
120
AREA
1326
HEIGHT
686
10-Aug-2023
14:19
ALSHS
S



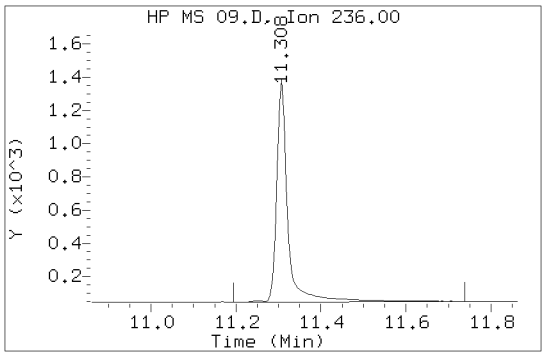
BEFORE

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
12:28
ALSHS
Server



AFTER

MASS
236
AREA
2453
HEIGHT
1336
10-Aug-2023
14:19
ALSHS
S

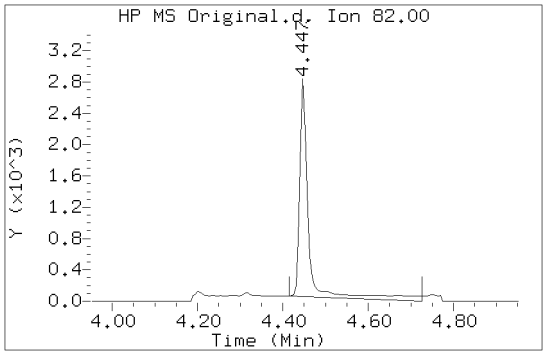


Nitrobenzene-d5 (4165-60-0)

Reason Code:

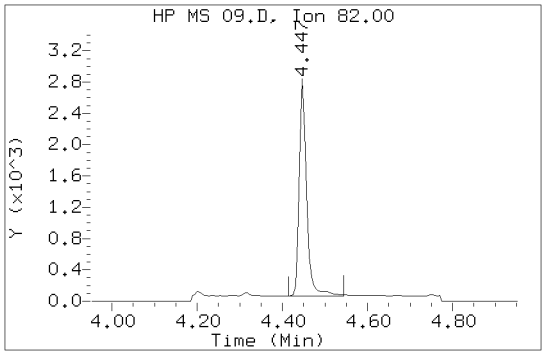
BEFORE

MASS
82
AREA
3986
HEIGHT
2780
10-Aug-2023
12:28
ALSHS
Server



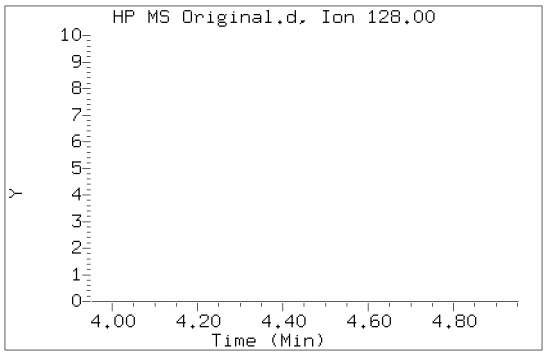
AFTER

MASS
82
AREA
3292
HEIGHT
2772
10-Aug-2023
14:19
ALSHS
S



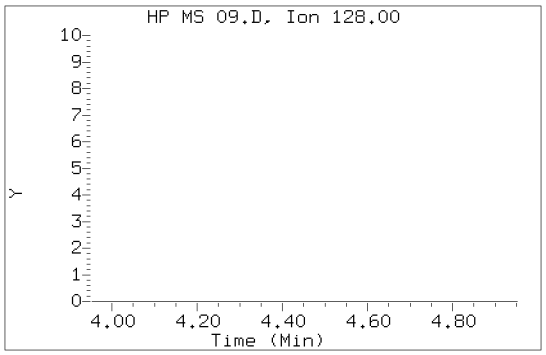
BEFORE

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
12:28
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S

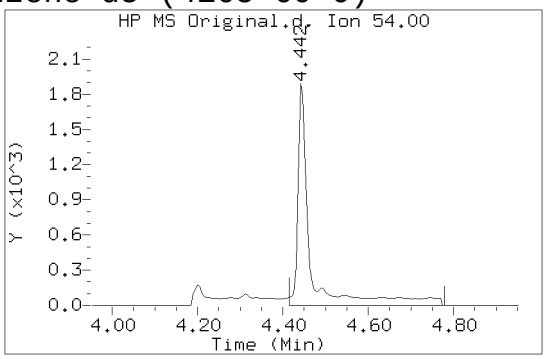


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\09.D
Inj Date : 10-AUG-2023 12:12
InstruID : SV6.i
LabSampID : LCS-198572

Nitrobenzene-d5 (4165-60-0)

BEFORE

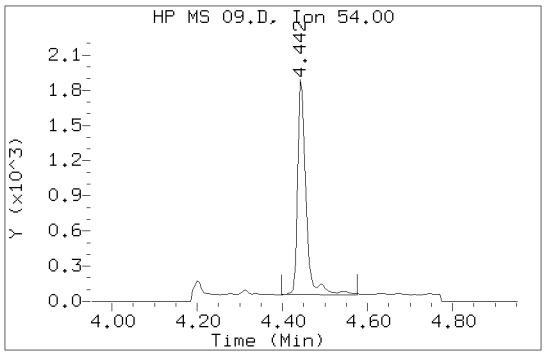
MASS
54
AREA
3746
HEIGHT
1890
10-Aug-2023
12:28
ALSHS
Server



Reason Code:

AFTER

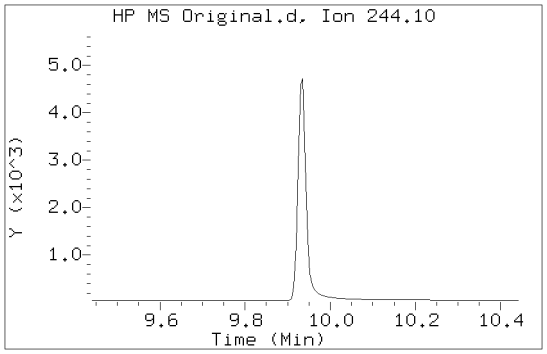
MASS
54
AREA
2481
HEIGHT
1830
10-Aug-2023
14:19
ALSHS
S



4-Terphenyl-d14 (1718-51-0)

BEFORE

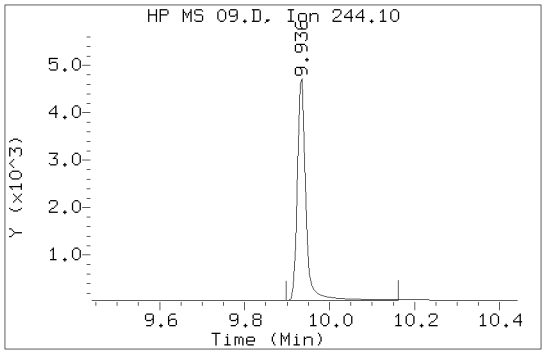
MASS
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AREA
0
HEIGHT
0
10-Aug-2023
12:28
ALSHS
Server



Reason Code:

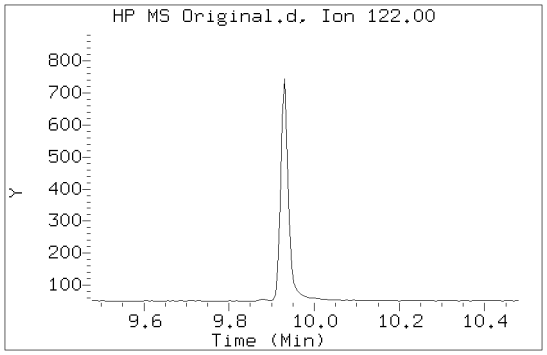
AFTER

MASS
244.1
AREA
6543
HEIGHT
4674
10-Aug-2023
14:19
ALSHS
S



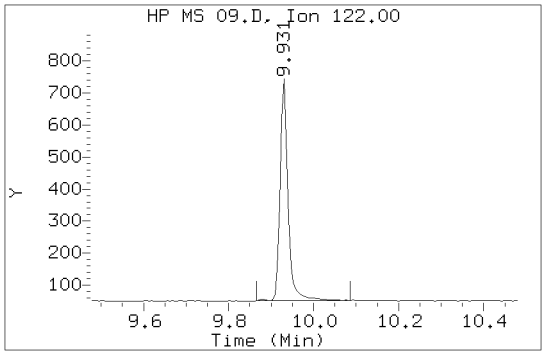
BEFORE

MASS
122
AREA
0
HEIGHT
0
10-Aug-2023
12:28
ALSHS
Server



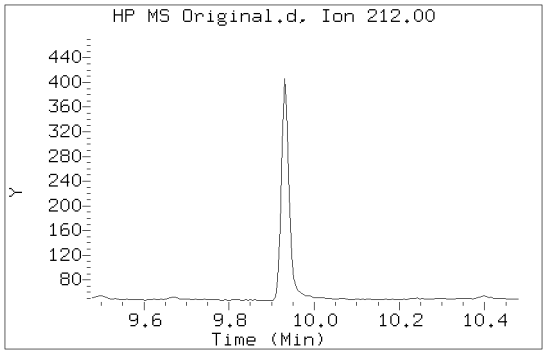
AFTER

MASS
122
AREA
901
HEIGHT
691
10-Aug-2023
14:19
ALSHS
S



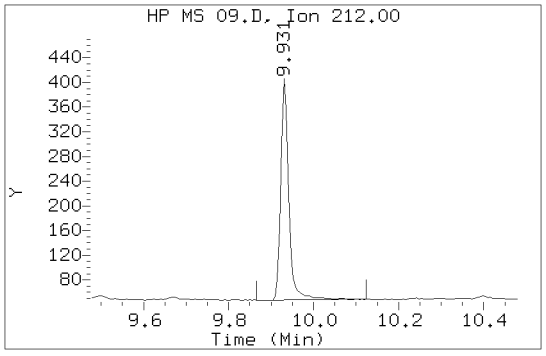
BEFORE

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
12:28
ALSHS
Server



AFTER

MASS
212
AREA
468
HEIGHT
358
10-Aug-2023
14:19
ALSHS
S



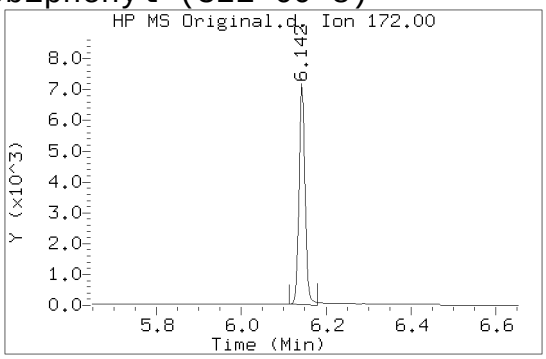
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\09.D
Inj Date : 10-AUG-2023 12:12
InstruID : SV6.i
LabSampID : LCS-198572

2-Fluorobiphenyl (321-60-8)

Reason Code:

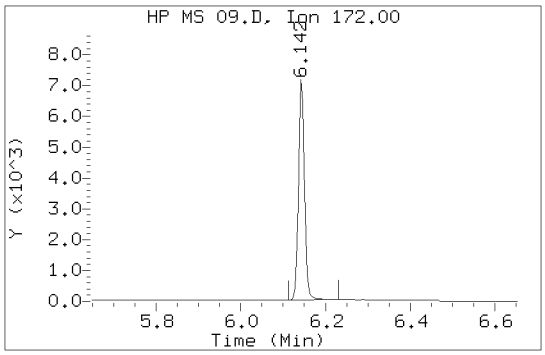
BEFORE

MASS
172
AREA
7131
HEIGHT
7166
10-Aug-2023
12:28
ALSHS
Server



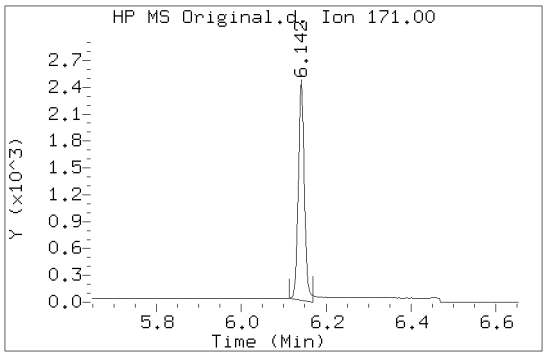
AFTER

MASS
172
AREA
7086
HEIGHT
7146
10-Aug-2023
14:19
ALSHS
S



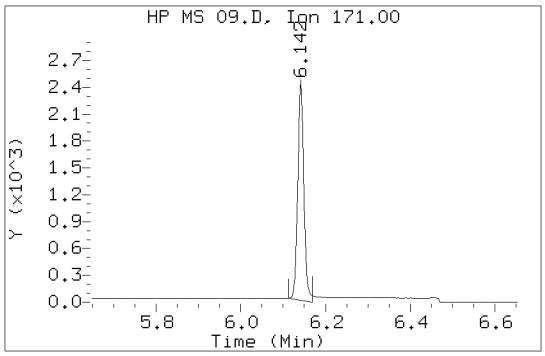
BEFORE

MASS
171
AREA
2472
HEIGHT
2461
10-Aug-2023
12:28
ALSHS
Server



AFTER

MASS
171
AREA
2472
HEIGHT
2461
10-Aug-2023
14:19
ALSHS
S



ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\10.D
Lab Smp Id: LCSD-198572 Client Smp ID: LCSD-198572
Inj Date : 10-AUG-2023 12:30
Operator : LG Inst ID: SV6.i
Smp Info : LCSD-198572;LCSD-198572;3;;LCSD
Misc Info : ;;0;1;
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 14:19 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 10 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7053

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.974	3.980	(1.000)	4358	0.10000	(aM)
* 45 Naphthalene-d8	136	5.110	5.117	(1.000)	16949	0.10000	
$ 33 Nitrobenzene-d5	82	4.447	4.452	(0.870)	4171	0.08100	0.08100(Q)
* 86 Acenaphthene-d10	164	6.813	6.818	(1.000)	8792	0.10000	
$ 69 2-Fluorobiphenyl	172	6.142	6.149	(0.902)	8927	0.09929	0.09929
* 126 Phenanthrene-d10	188	8.279	8.290	(1.000)	16775	0.10000	
* 182 Chrysene-d12	240	11.307	11.318	(1.000)	12047	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.935	9.941	(0.879)	8100	0.09114	0.09114(M)
* 198 Perylene-d12	264	13.526	13.536	(1.000)	11031	0.10000	
1 1,4-Dioxane	58	2.210	2.199	(0.556)	799	0.05404	0.05404(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248706

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\10.D

Date : 10-AUG-2023 12:30

Client ID: LCSD-198572

Instrument: SV6.i

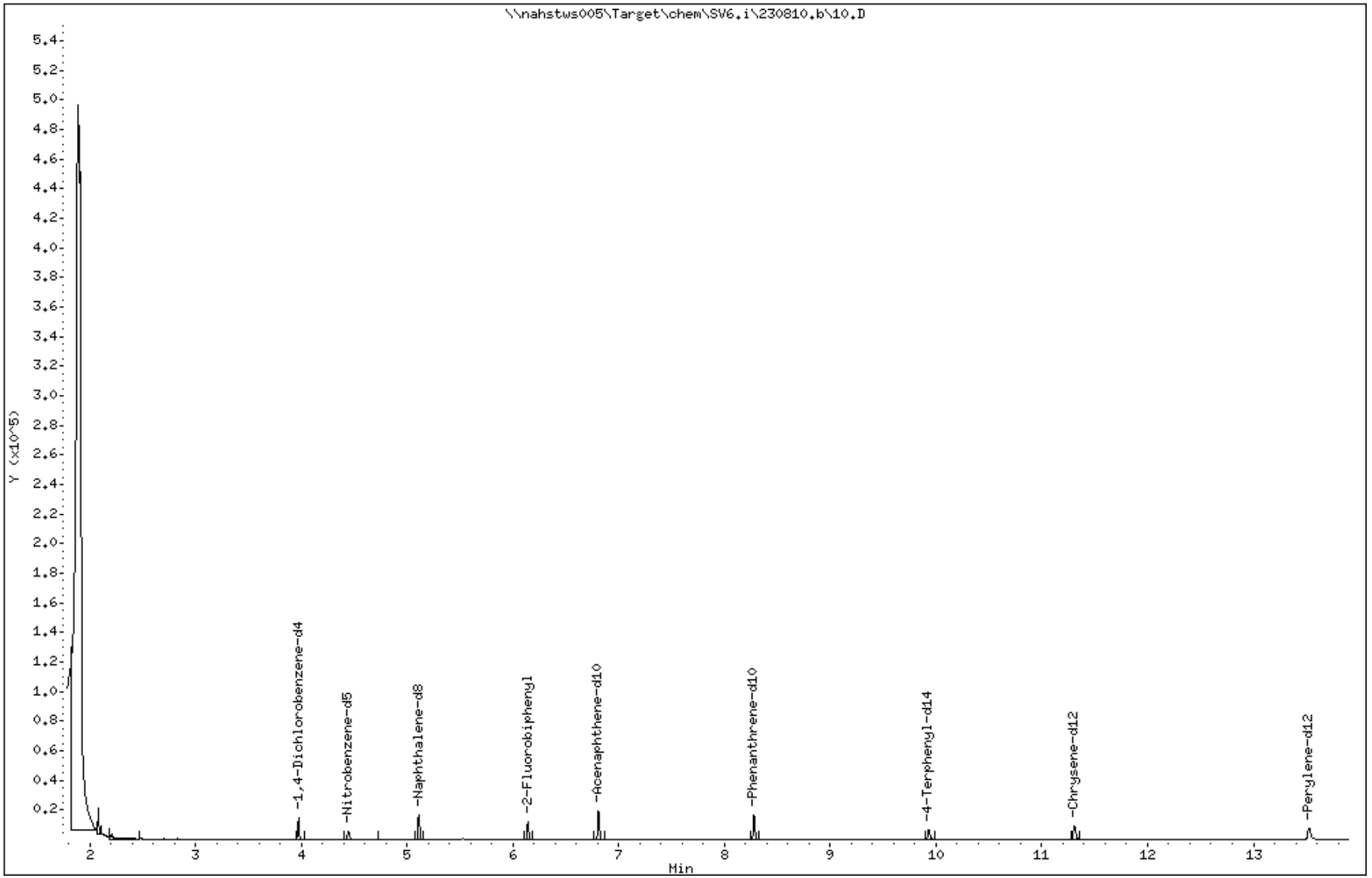
Sample Info: LCSD-198572;LCSD-198572;3;;LCSD

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



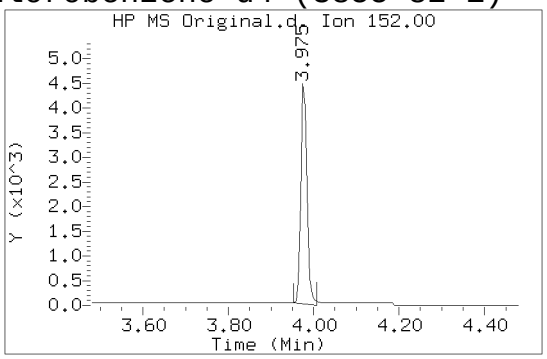
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\10.D
Inj Date : 10-AUG-2023 12:30
InstruID : SV6.i
LabSampID : LCSD-198572

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

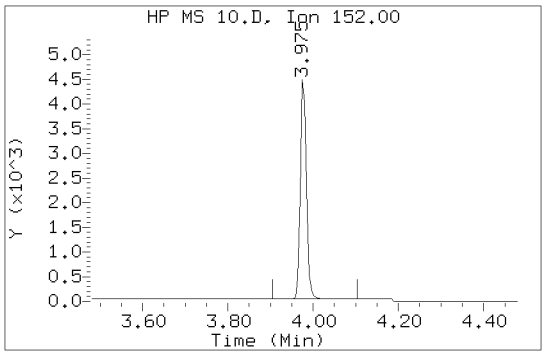
BEFORE

MASS
152
AREA
4421
HEIGHT
4464
10-Aug-2023
12:45
ALSHS
Server



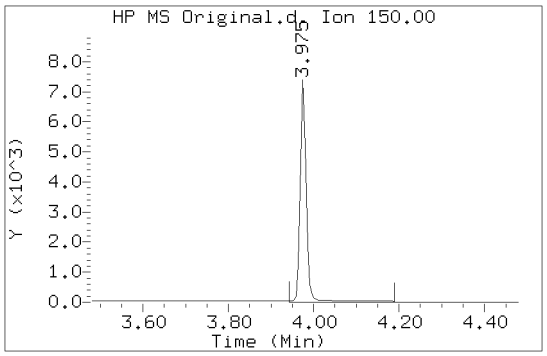
AFTER

MASS
152
AREA
4358
HEIGHT
4446
10-Aug-2023
14:19
ALSHS
S



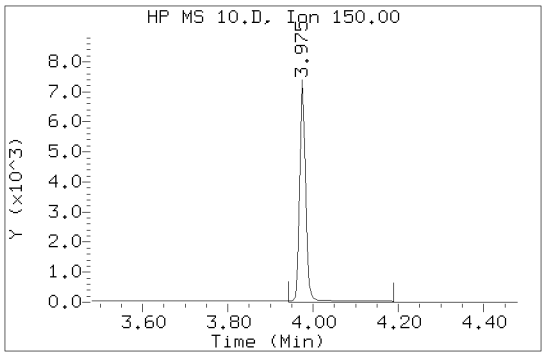
BEFORE

MASS
150
AREA
7562
HEIGHT
7396
10-Aug-2023
12:45
ALSHS
Server



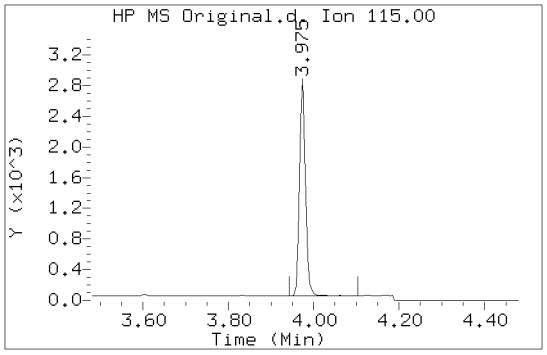
AFTER

MASS
150
AREA
7562
HEIGHT
7396
10-Aug-2023
14:19
ALSHS
S



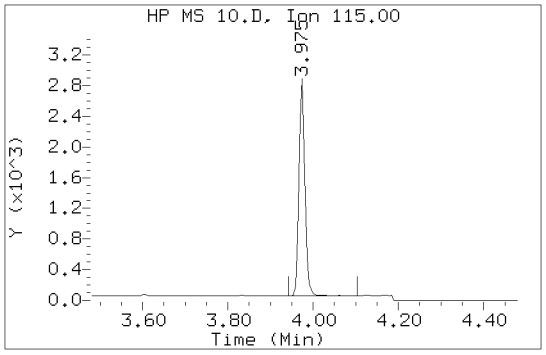
BEFORE

MASS
115
AREA
2724
HEIGHT
2834
10-Aug-2023
12:45
ALSHS
Server



AFTER

MASS
115
AREA
2724
HEIGHT
2834
10-Aug-2023
14:19
ALSHS
S

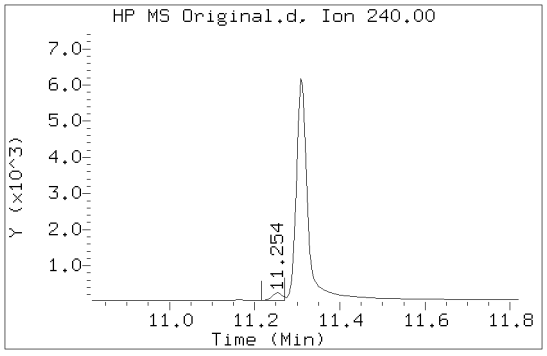


Chrysene-d12 (1719-03-5)

Reason Code:

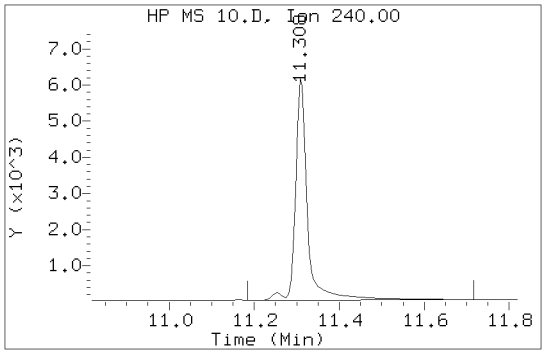
BEFORE

MASS
240
AREA
324
HEIGHT
208
10-Aug-2023
12:45
ALSHS
Server



AFTER

MASS
240
AREA
12047
HEIGHT
6121
10-Aug-2023
14:19
ALSHS
S



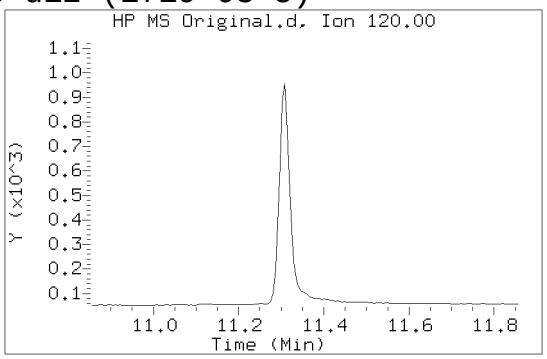
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Inj Date : 10-AUG-2023 12:30
InstruID : SV6.i
LabSampID : LCSD-198572

Chrysene-d12 (1719-03-5)

Reason Code:

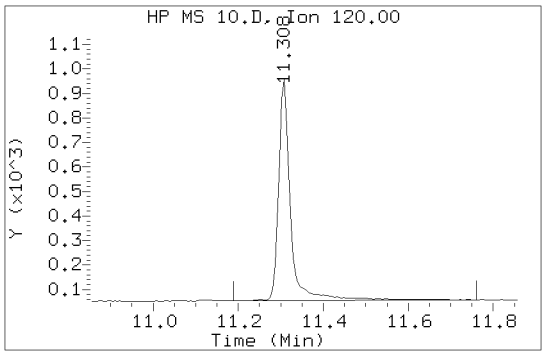
BEFORE

MASS
120
AREA
0
HEIGHT
0
10-Aug-2023
12:45
ALSHS
Server



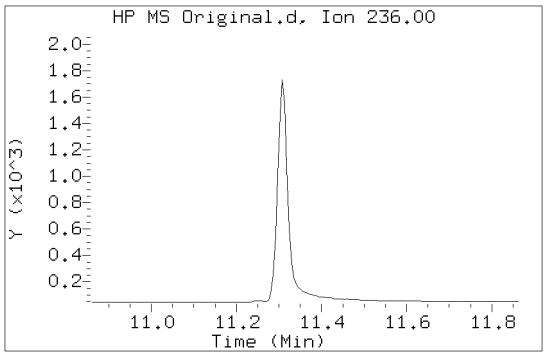
AFTER

MASS
120
AREA
1768
HEIGHT
900
10-Aug-2023
14:19
ALSHS
S



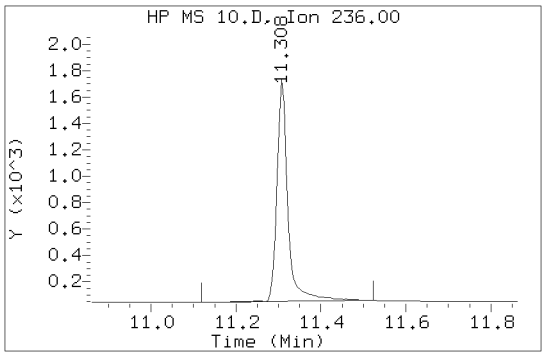
BEFORE

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
12:45
ALSHS
Server



AFTER

MASS
236
AREA
3014
HEIGHT
1677
10-Aug-2023
14:19
ALSHS
S

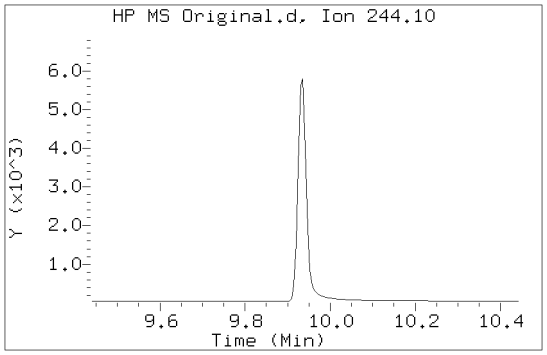


4-Terphenyl-d14 (1718-51-0)

Reason Code:

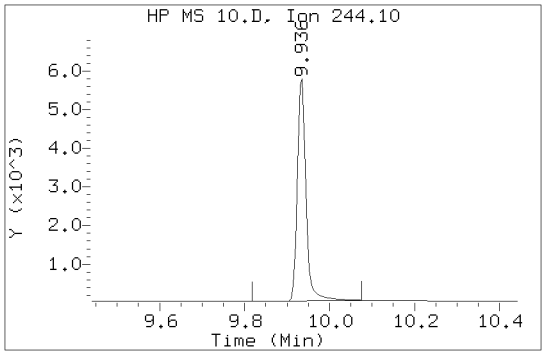
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
10-Aug-2023
12:45
ALSHS
Server



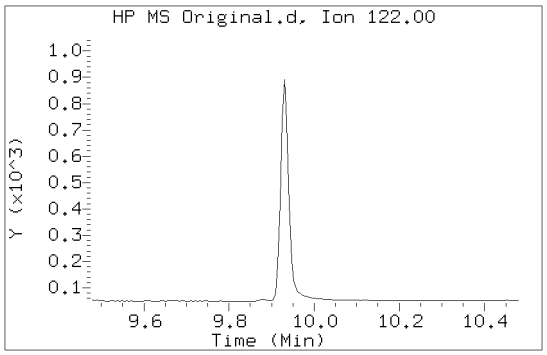
AFTER

MASS
244.1
AREA
8100
HEIGHT
5742
10-Aug-2023
14:19
ALSHS
S



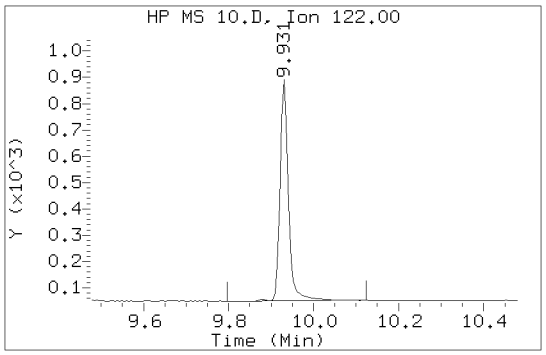
BEFORE

MASS
122
AREA
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HEIGHT
0
10-Aug-2023
12:45
ALSHS
Server



AFTER

MASS
122
AREA
1157
HEIGHT
839
10-Aug-2023
14:19
ALSHS
S



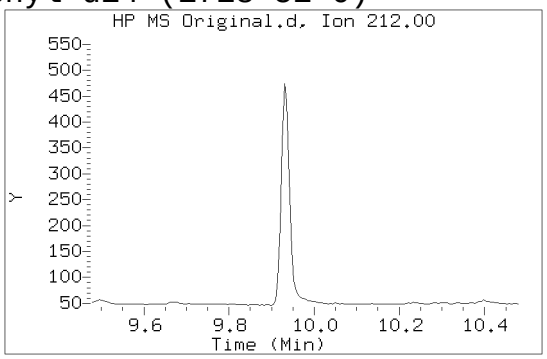
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\10.D
Inj Date : 10-AUG-2023 12:30
InstruID : SV6.i
LabSampID : LCSD-198572

4-Terphenyl-d14 (1718-51-0)

Reason Code:

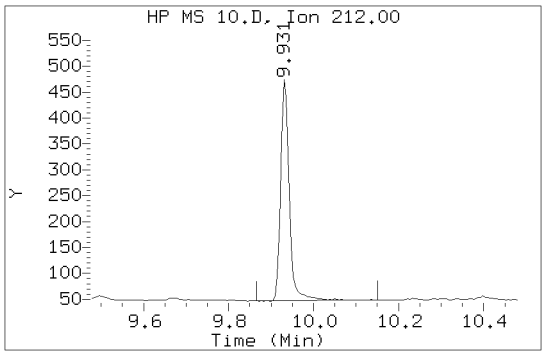
BEFORE

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
12:45
ALSHS
Server



AFTER

MASS
212
AREA
600
HEIGHT
426
10-Aug-2023
14:19
ALSHS
S



Data File: \\nahstws005\Target\chem\SV6.i\230810.b\11.D Page 1
Report Date: 10-Aug-2023 14:21

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\11.D
Lab Smp Id: HS23080101-01
Inj Date : 10-AUG-2023 12:48
Operator : LG Inst ID: SV6.i
Smp Info : HS23080101-01
Misc Info : ;1;0;10
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 14:19 SV6.i Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 11
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTW7053

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)
* 20 1,4-Dichlorobenzene-d4	152	3.974	3.980	(1.000)	3889	0.10000	(aM)
* 45 Naphthalene-d8	136	5.113	5.117	(1.000)	17090	0.10000	(Q)
$ 33 Nitrobenzene-d5	82	4.447	4.452	(0.870)	415	0.00799	0.07992(M)
* 86 Acenaphthene-d10	164	6.813	6.818	(1.000)	7954	0.10000	
$ 69 2-Fluorobiphenyl	172	6.146	6.149	(0.902)	834	0.01025	0.1025(M)
* 126 Phenanthrene-d10	188	8.284	8.290	(1.000)	14693	0.10000	
* 182 Chrysene-d12	240	11.313	11.318	(1.000)	15486	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.935	9.941	(0.878)	879	0.00769	0.07694(M)
* 198 Perylene-d12	264	13.531	13.536	(1.000)	9661	0.10000	
1 1,4-Dioxane	58	2.199	2.199	(0.553)	1181	0.08950	0.8950(Q)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248711

Data File: \\nahstws005\Target\chem\SV6.i\230810.b\11.D

Page 1

Date : 10-AUG-2023 12:48

Client ID:

Instrument: SV6.i

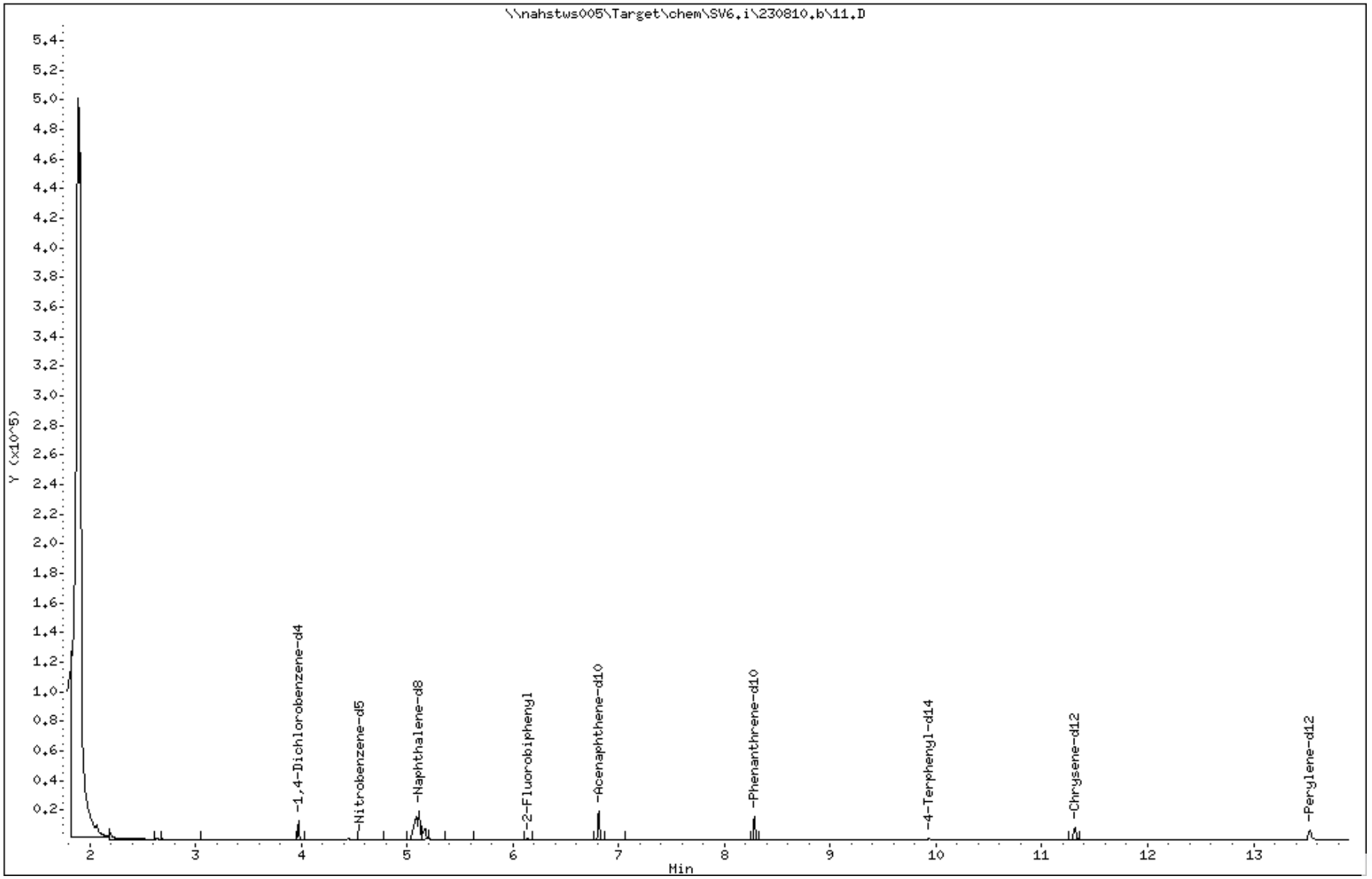
Sample Info: HS23080101-01

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



Data File: \\nahstws005\Target\chem\SV6.i\230810.b\11.D

Date : 10-AUG-2023 12:48

Client ID:

Instrument: SV6.i

Sample Info: HS23080101-01

Purge Volume: 1000.0

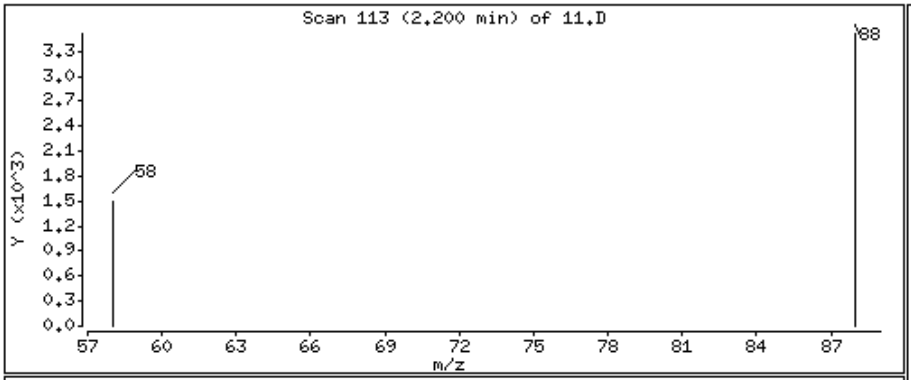
Operator: LG

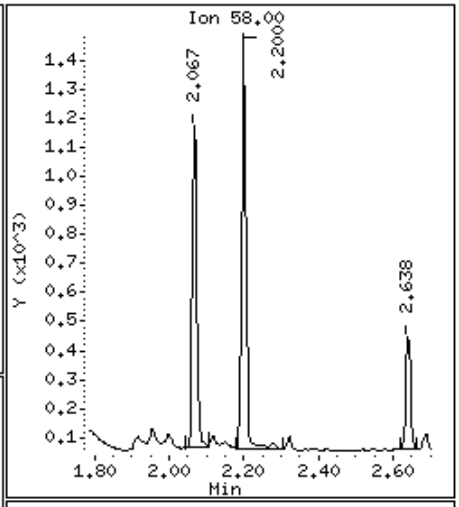
Column phase: RTX-5SIL MS

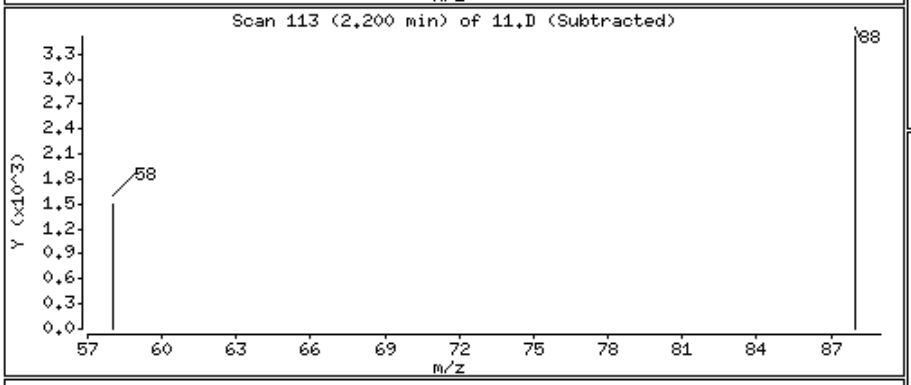
Column diameter: 0.28

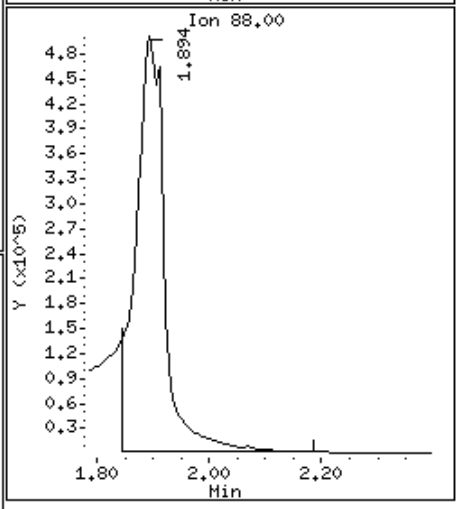
1 1,4-Dioxane

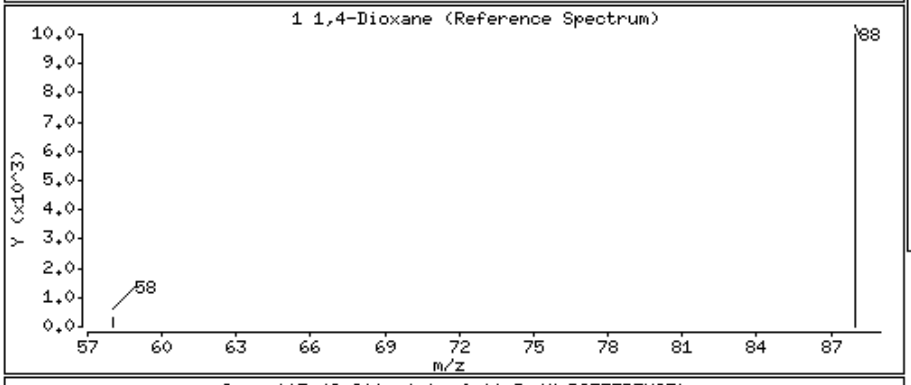
Concentration: 0.8950 ug/L

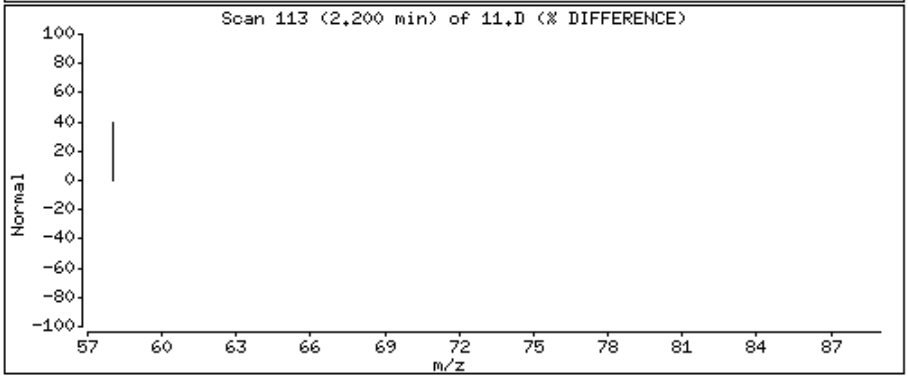










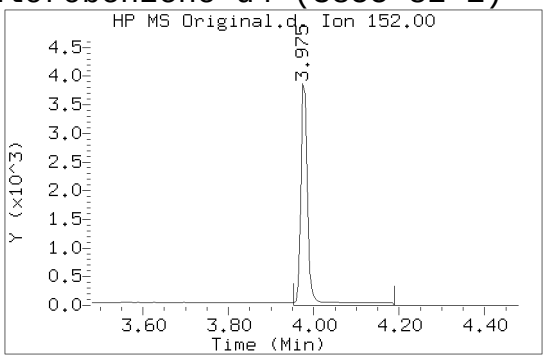


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\11.D
Inj Date : 10-AUG-2023 12:48
InstruID : SV6.i
LabSampID : HS23080101-01

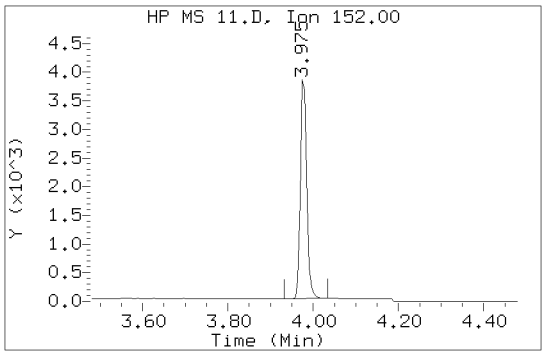
1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

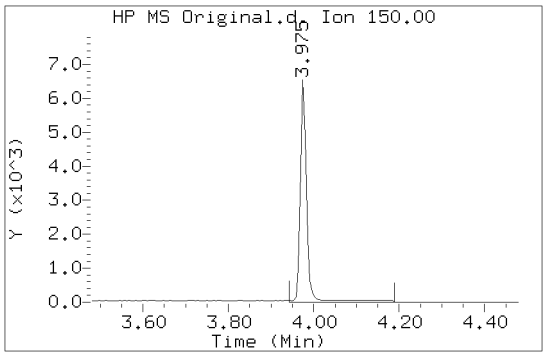
BEFORE
MASS
152
AREA
4597
HEIGHT
3869
10-Aug-2023
13:03
ALSHS
Server



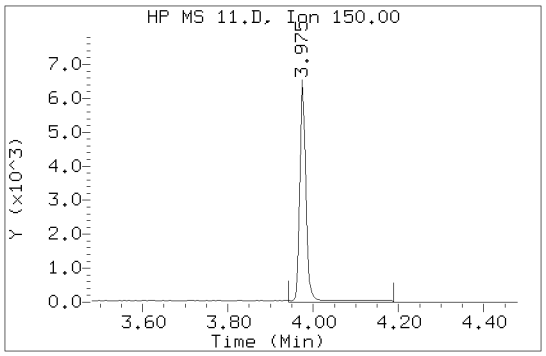
AFTER
MASS
152
AREA
3889
HEIGHT
3818
10-Aug-2023
14:19
ALSHS
S



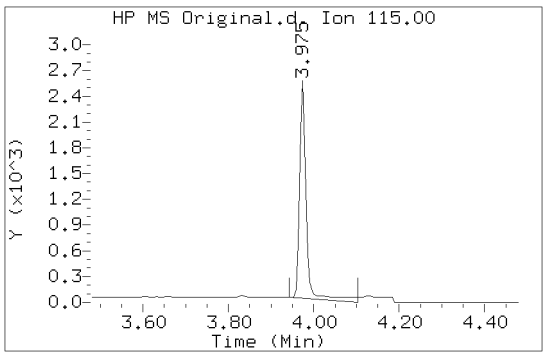
BEFORE
MASS
150
AREA
6889
HEIGHT
6542
10-Aug-2023
13:03
ALSHS
Server



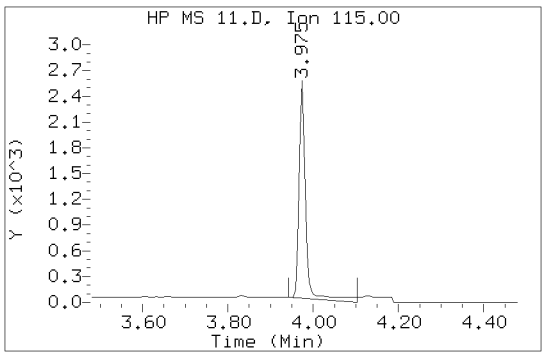
AFTER
MASS
150
AREA
6889
HEIGHT
6542
10-Aug-2023
14:19
ALSHS
S



BEFORE
MASS
115
AREA
2728
HEIGHT
2534
10-Aug-2023
13:03
ALSHS
Server



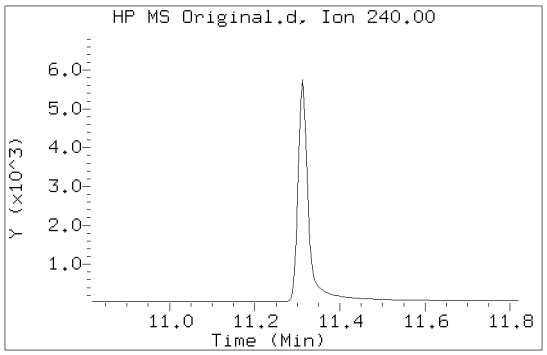
AFTER
MASS
115
AREA
2728
HEIGHT
2534
10-Aug-2023
14:19
ALSHS
S



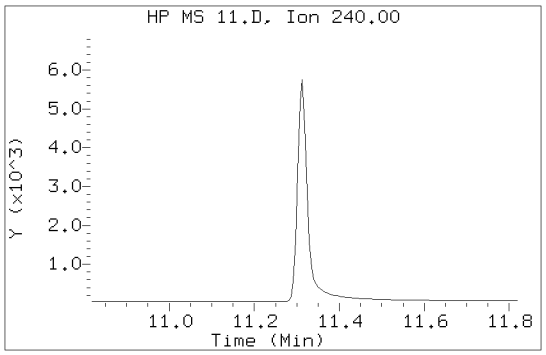
Chrysene-d12 (1719-03-5)

Reason Code:

BEFORE
MASS
240
AREA
0
HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



AFTER
MASS
240
AREA
15486
HEIGHT
5751
10-Aug-2023
14:19
ALSHS
S



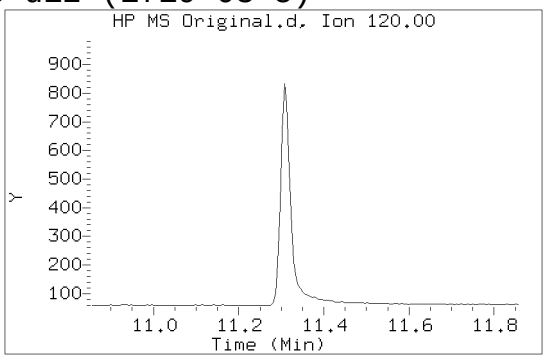
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\11.D
Inj Date : 10-AUG-2023 12:48
InstruID : SV6.i
LabSampID : HS23080101-01

Chrysene-d12 (1719-03-5)

Reason Code:

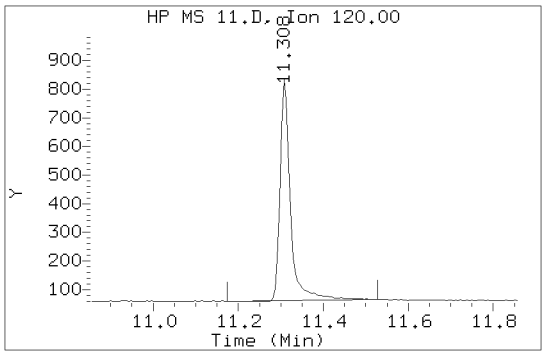
BEFORE

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AREA
0
HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



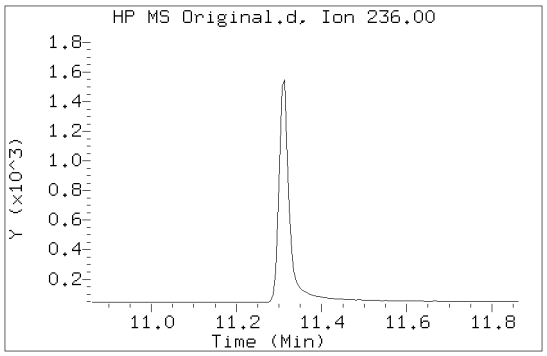
AFTER

MASS
120
AREA
1324
HEIGHT
771
10-Aug-2023
14:19
ALSHS
S



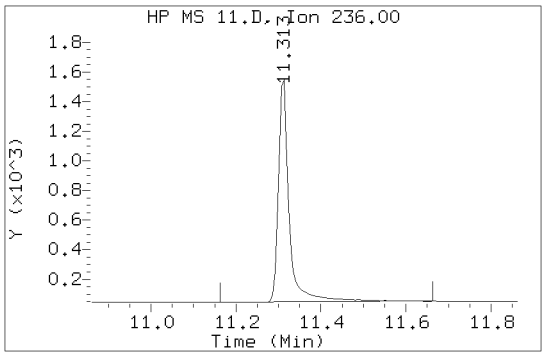
BEFORE

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



AFTER

MASS
236
AREA
2662
HEIGHT
1498
10-Aug-2023
14:19
ALSHS
S

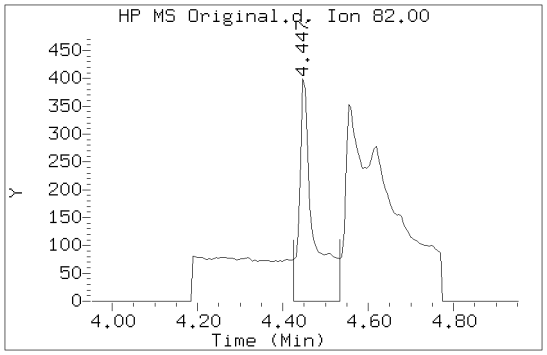


Nitrobenzene-d5 (4165-60-0)

Reason Code:

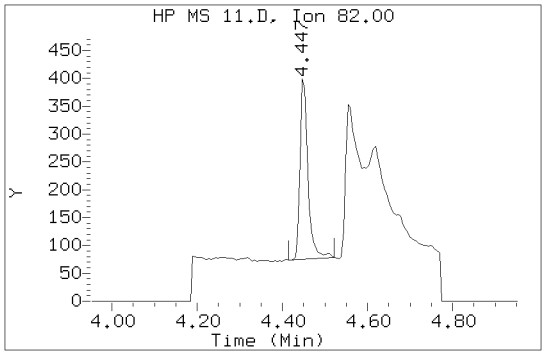
BEFORE

MASS
82
AREA
930
HEIGHT
399
10-Aug-2023
13:03
ALSHS
Server



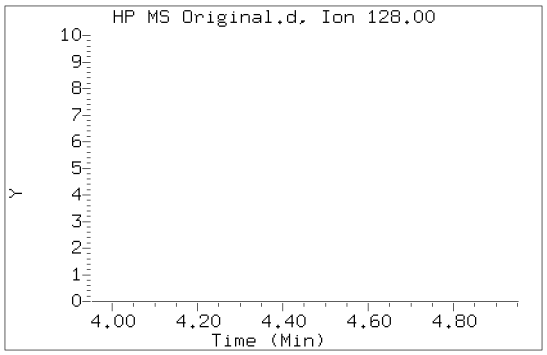
AFTER

MASS
82
AREA
415
HEIGHT
323
10-Aug-2023
14:19
ALSHS
S



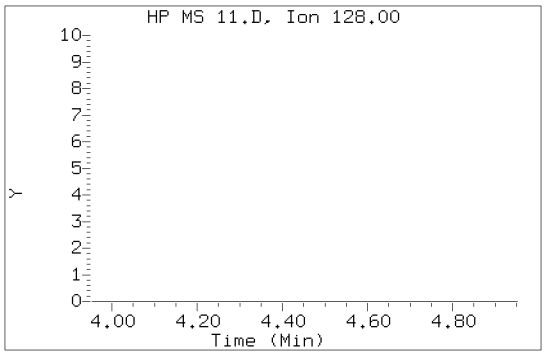
BEFORE

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



AFTER

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
14:19
ALSHS
S

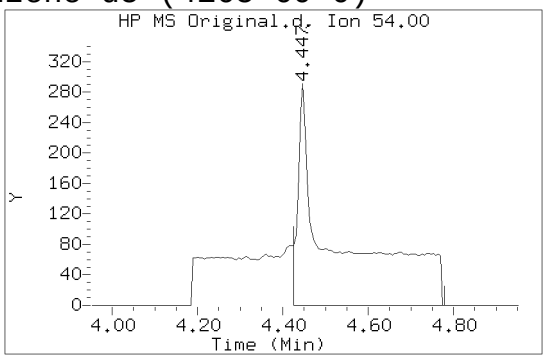


Data File : \\nahstws005\Target\chem\SV6.i\230810.b\11.D
Inj Date : 10-AUG-2023 12:48
InstruID : SV6.i
LabSampID : HS23080101-01

Nitrobenzene-d5 (4165-60-0)

BEFORE

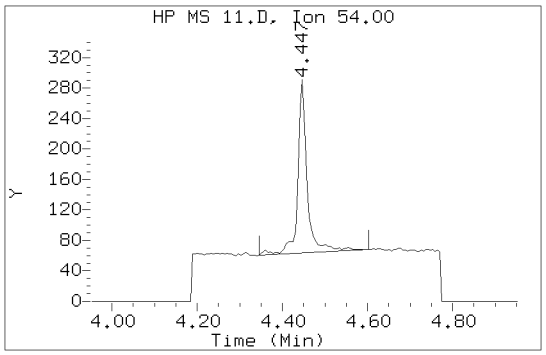
MASS
54
AREA
1699
HEIGHT
291
10-Aug-2023
13:03
ALSHS
Server



Reason Code:

AFTER

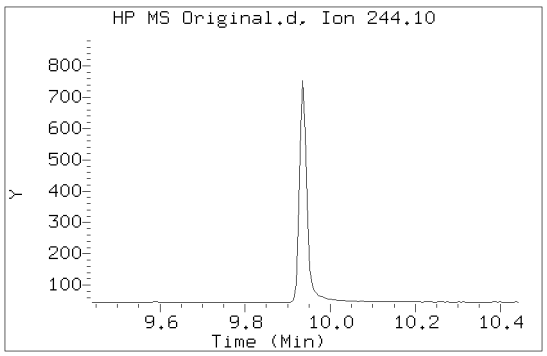
MASS
54
AREA
341
HEIGHT
227
10-Aug-2023
14:19
ALSHS
S



4-Terphenyl-d14 (1718-51-0)

BEFORE

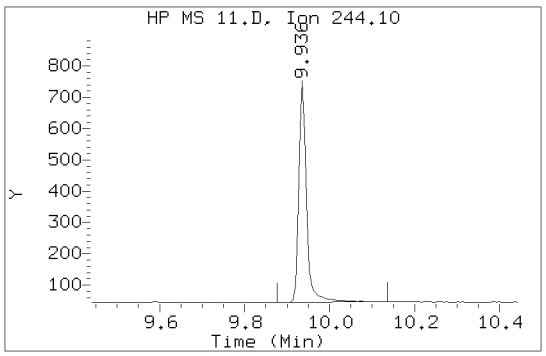
MASS
244.1
AREA
0
HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



Reason Code:

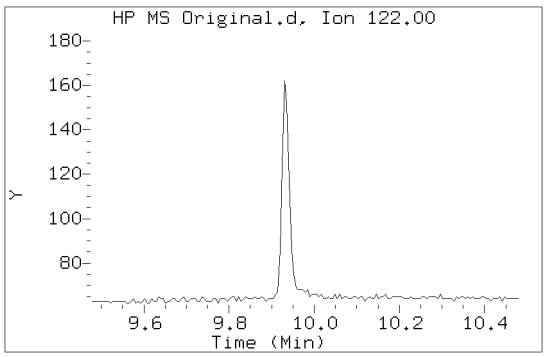
AFTER

MASS
244.1
AREA
879
HEIGHT
706
10-Aug-2023
14:19
ALSHS
S



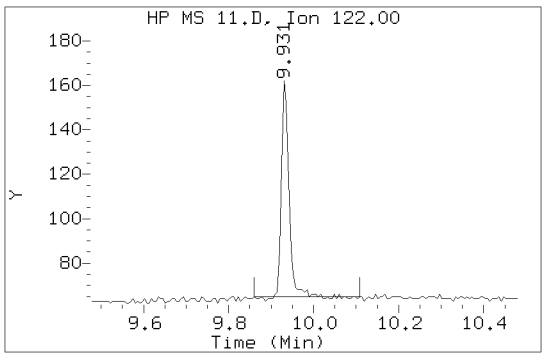
BEFORE

MASS
122
AREA
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HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



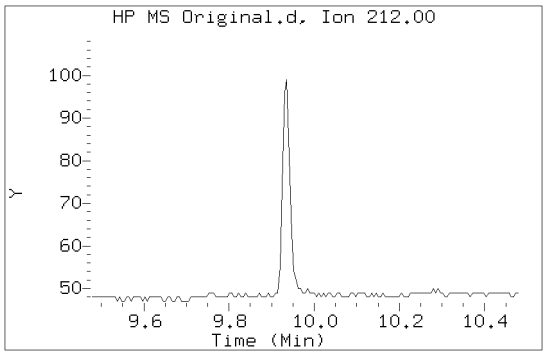
AFTER

MASS
122
AREA
115
HEIGHT
97
10-Aug-2023
14:19
ALSHS
S



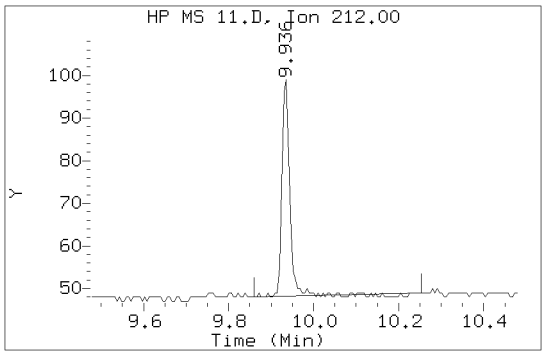
BEFORE

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
13:03
ALSHS
Server



AFTER

MASS
212
AREA
61
HEIGHT
50
10-Aug-2023
14:19
ALSHS
S



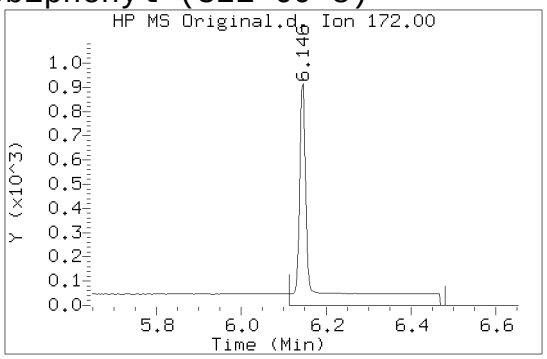
Data File : \\nahstws005\Target\chem\SV6.i\230810.b\11.D
Inj Date : 10-AUG-2023 12:48
InstruID : SV6.i
LabSampID : HS23080101-01

2-Fluorobiphenyl (321-60-8)

Reason Code:

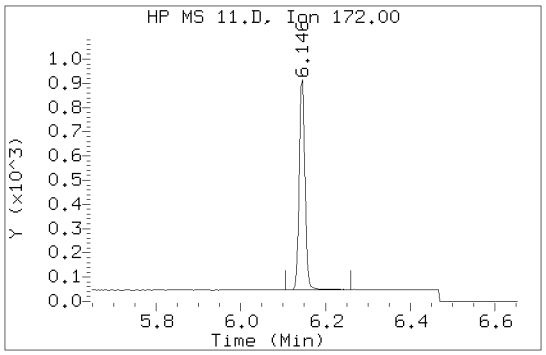
BEFORE

MASS
172
AREA
1869
HEIGHT
915
10-Aug-2023
13:03
ALSHS
Server



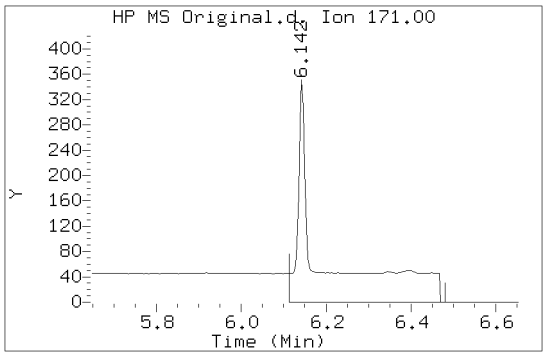
AFTER

MASS
172
AREA
834
HEIGHT
867
10-Aug-2023
14:19
ALSHS
S



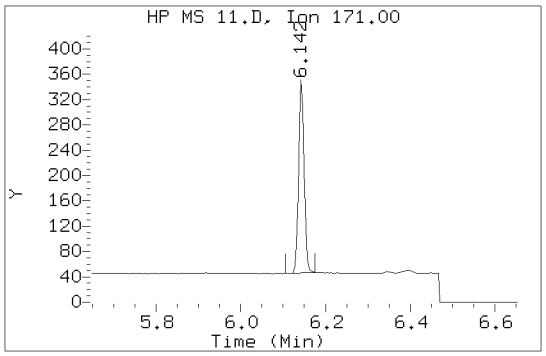
BEFORE

MASS
171
AREA
1288
HEIGHT
351
10-Aug-2023
13:03
ALSHS
Server



AFTER

MASS
171
AREA
277
HEIGHT
304
10-Aug-2023
14:19
ALSHS
S



Data File: \\nahstws005\Target\chem\SV6.i\230810.b\12.D Page 1
Report Date: 10-Aug-2023 13:22

ALS Laboratory Group

GC/MS Semivolatiles EPA method 8270D

Data file : \\nahstws005\Target\chem\SV6.i\230810.b\12.D
Lab Smp Id: 1 4DX-0.08
Inj Date : 10-AUG-2023 13:06
Operator : LG Inst ID: SV6.i
Smp Info : 1 4DX-0.08;;2
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\SV6.i\230810.b\DXSIM.m
Meth Date : 10-Aug-2023 13:21 jjuarez Quant Type: ISTD
Cal Date : 16-JUN-2023 15:56 Cal File: 15.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 14dx.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * Uf * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vt	1000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)
* 20 1,4-Dichlorobenzene-d4	152	3.974	3.974	(1.000)	3597	0.10000	(aQM)
* 45 Naphthalene-d8	136	5.114	5.114	(1.000)	14483	0.10000	
$ 33 Nitrobenzene-d5	82	4.447	4.447	(0.870)	3162	0.08000	0.07186(M)
* 86 Acenaphthene-d10	164	6.813	6.813	(1.000)	7075	0.10000	
$ 69 2-Fluorobiphenyl	172	6.146	6.146	(0.902)	5531	0.08000	0.07645(M)
* 126 Phenanthrene-d10	188	8.284	8.284	(1.000)	13274	0.10000	
* 182 Chrysene-d12	240	11.313	11.313	(1.000)	8318	0.10000	(M)
$ 158 4-Terphenyl-d14	244	9.935	9.935	(0.878)	4769	0.08000	0.07771(M)
* 198 Perylene-d12	264	13.531	13.531	(1.000)	7875	0.10000	
1 1,4-Dioxane	58	2.173	2.173	(0.547)	872	0.08000	0.07145(QM)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

01248718

Data File: \\nahstws005\target\chem\sv6.i\230810.b\12.d

Page 1

Date : 10-AUG-2023 13:06

Client ID:

Instrument: SV6.i

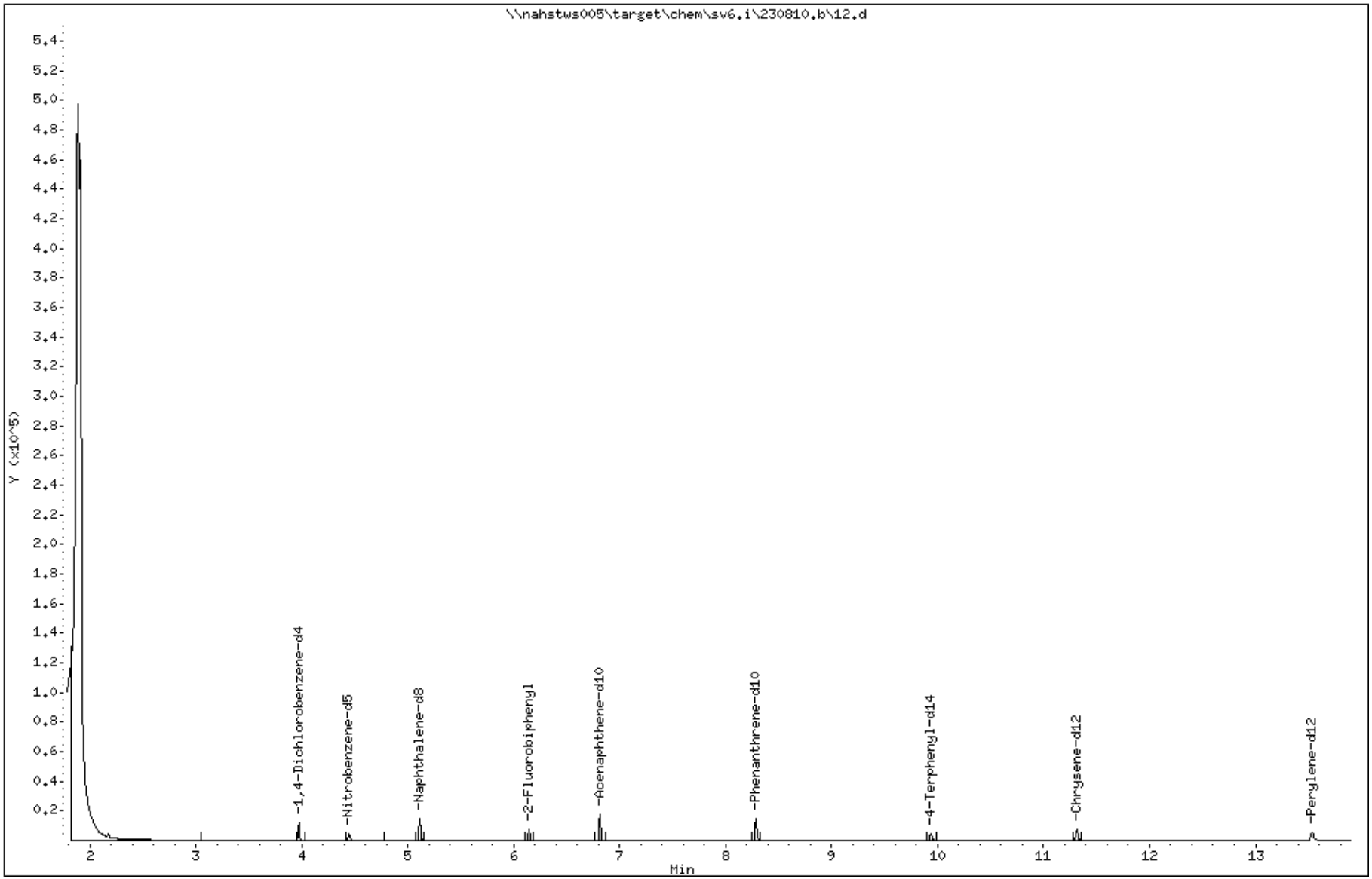
Sample Info: 1 4DX-0.08;;2

Purge Volume: 1000.0

Operator: LG

Column phase: RTX-5SIL MS

Column diameter: 0.28



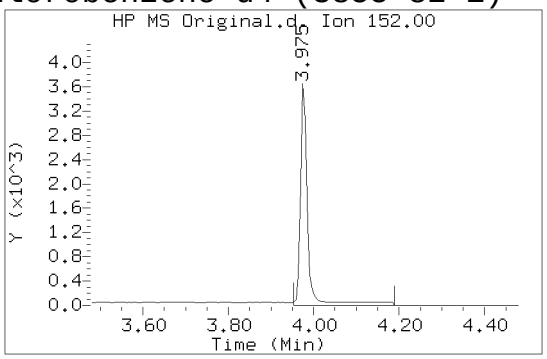
Data File : \\nahstws005\target\chem\sv6.i\230810.b\12.d
Inj Date : 10-AUG-2023 13:06
InstruID : SV6.i
LabSampID : 1 4DX-CCV END

1,4-Dichlorobenzene-d4 (3855-82-1)

Reason Code:

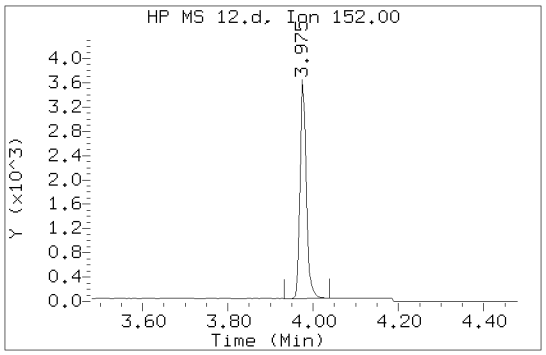
BEFORE

MASS
152
AREA
4309
HEIGHT
3650
10-Aug-2023
13:21
ALSHS
Server



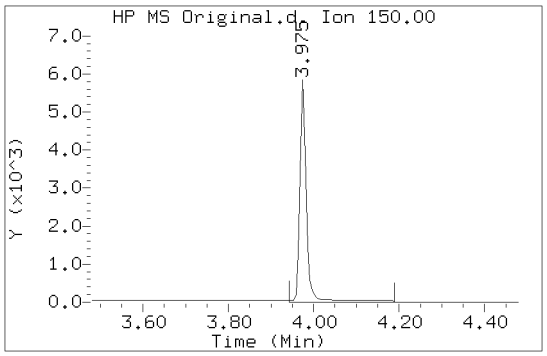
AFTER

MASS
152
AREA
3597
HEIGHT
3599
14-Aug-2023
14:56
ALSHS
Ser



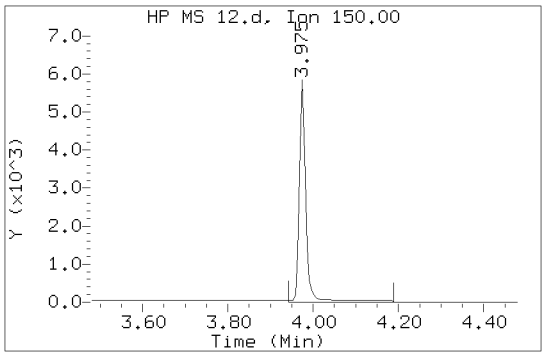
BEFORE

MASS
150
AREA
6402
HEIGHT
5843
10-Aug-2023
13:21
ALSHS
Server



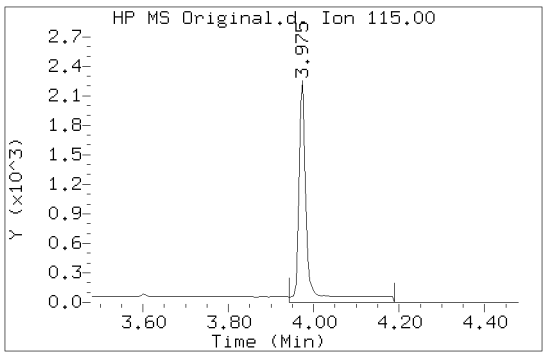
AFTER

MASS
150
AREA
6402
HEIGHT
5843
14-Aug-2023
14:56
ALSHS
Ser



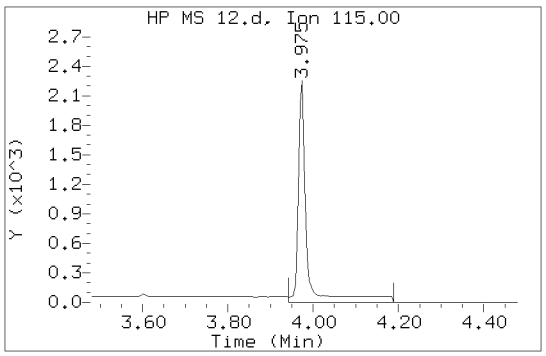
BEFORE

MASS
115
AREA
3100
HEIGHT
2253
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
115
AREA
3100
HEIGHT
2253
14-Aug-2023
14:56
ALSHS
Ser

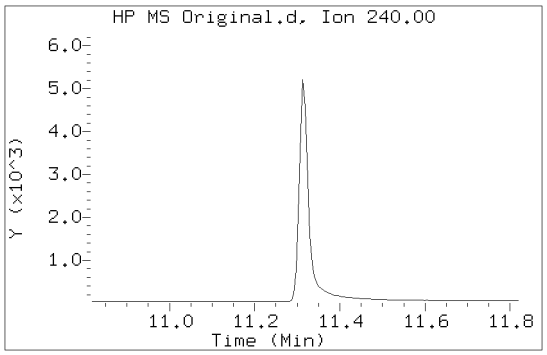


Chrysene-d12 (1719-03-5)

Reason Code:

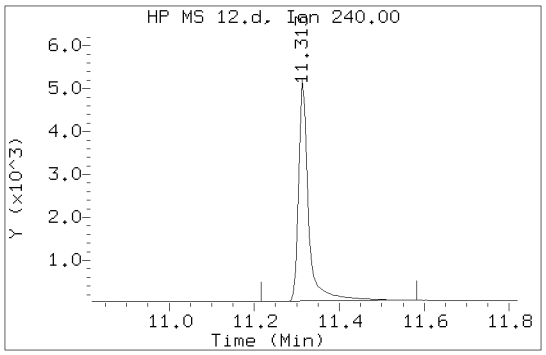
BEFORE

MASS
240
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
240
AREA
8318
HEIGHT
5157
14-Aug-2023
14:56
ALSHS
Ser



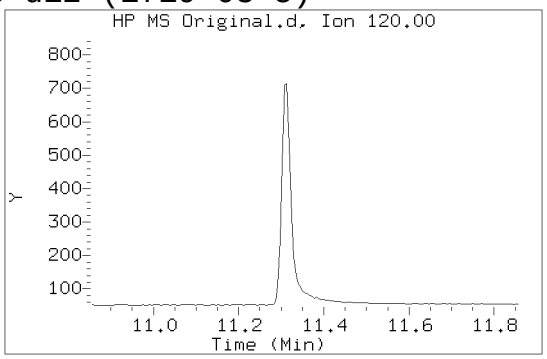
Data File : \\nahstws005\target\chem\sv6.i\230810.b\12.d
Inj Date : 10-AUG-2023 13:06
InstruID : SV6.i
LabSampID : 1 4DX-CCV END

Chrysene-d12 (1719-03-5)

Reason Code:

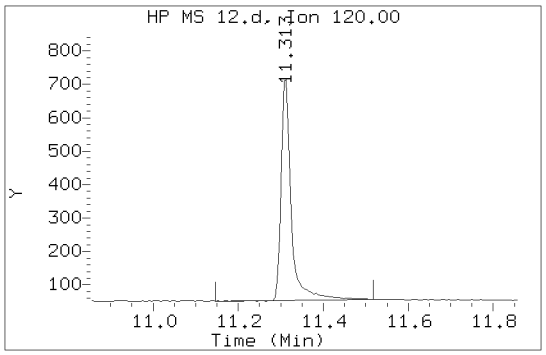
BEFORE

MASS
120
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



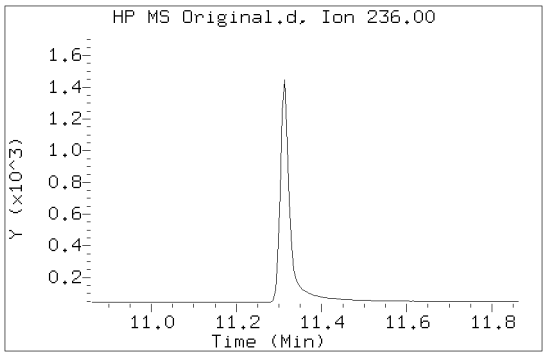
AFTER

MASS
120
AREA
1097
HEIGHT
660
14-Aug-2023
14:56
ALSHS
Ser



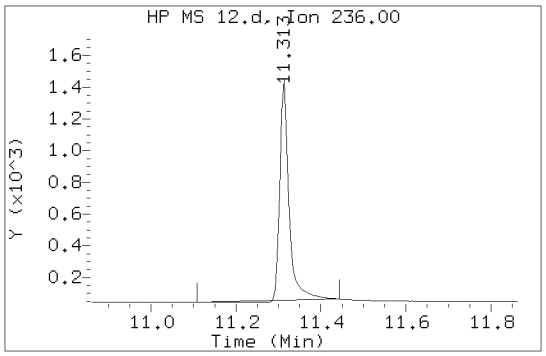
BEFORE

MASS
236
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
236
AREA
2055
HEIGHT
1389
14-Aug-2023
14:56
ALSHS
Ser

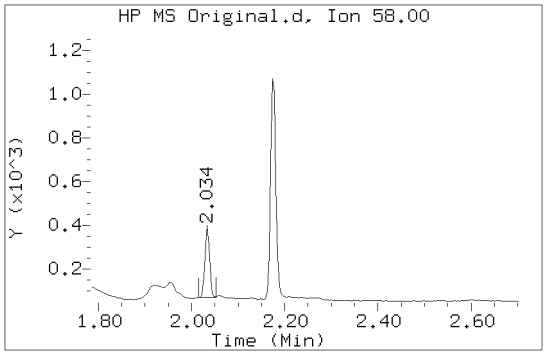


1,4-Dioxane ()

Reason Code:

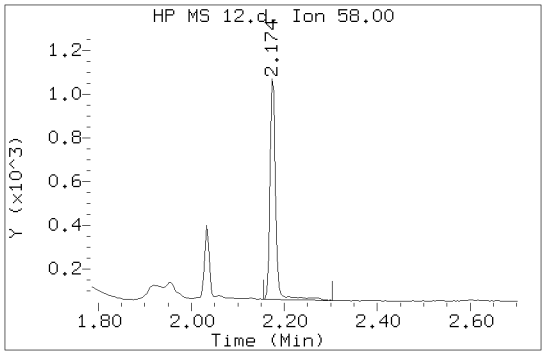
BEFORE

MASS
58
AREA
226
HEIGHT
330
10-Aug-2023
13:21
ALSHS
Server



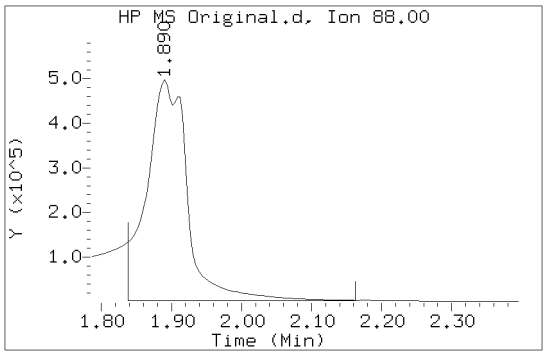
AFTER

MASS
58
AREA
872
HEIGHT
1009
14-Aug-2023
14:56
ALSHS
Ser



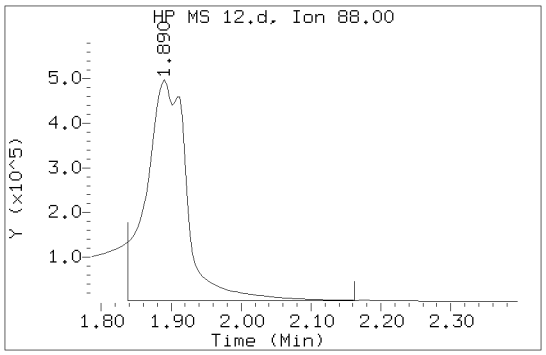
BEFORE

MASS
88
AREA
2003659
HEIGHT
494717
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
88
AREA
2003659
HEIGHT
494717
14-Aug-2023
14:56
ALSHS
Ser



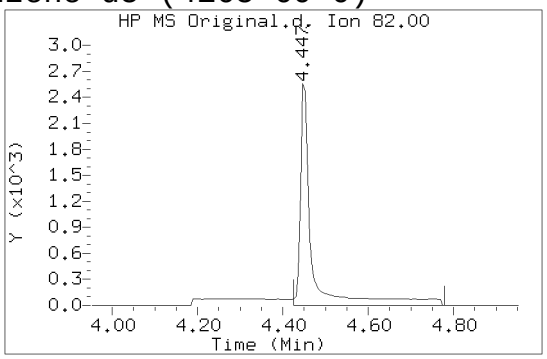
Data File : \\nahstws005\target\chem\sv6.i\230810.b\12.d
Inj Date : 10-AUG-2023 13:06
InstruID : SV6.i
LabSampID : 1 4DX-CCV END

Nitrobenzene-d5 (4165-60-0)

Reason Code:

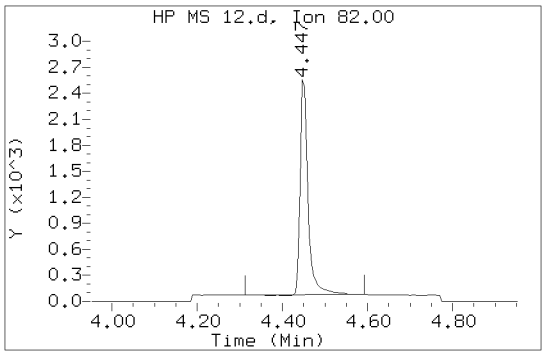
BEFORE

MASS
82
AREA
4712
HEIGHT
2557
10-Aug-2023
13:21
ALSHS
Server



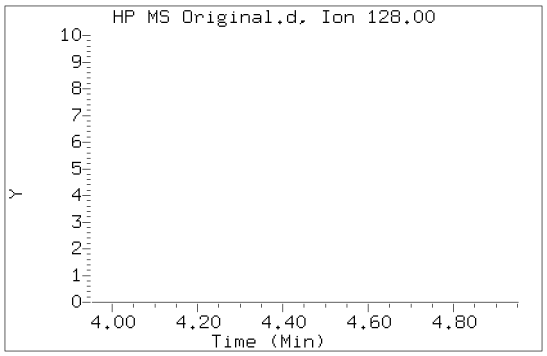
AFTER

MASS
82
AREA
3162
HEIGHT
2482
14-Aug-2023
14:56
ALSHS
Ser



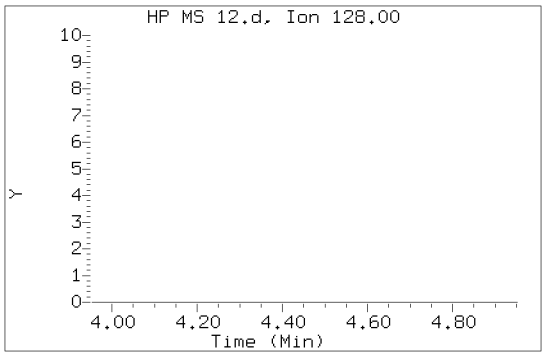
BEFORE

MASS
128
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



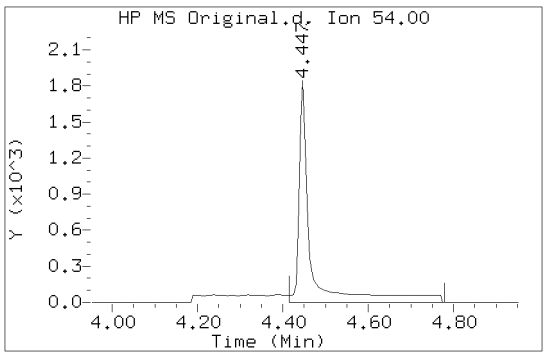
AFTER

MASS
128
AREA
0
HEIGHT
0
14-Aug-2023
14:56
ALSHS
Ser



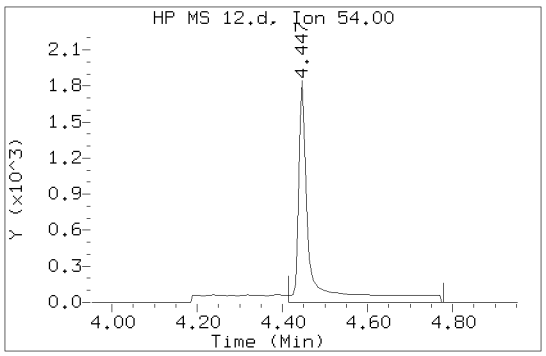
BEFORE

MASS
54
AREA
3454
HEIGHT
1844
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
54
AREA
3454
HEIGHT
1844
14-Aug-2023
14:56
ALSHS
Ser

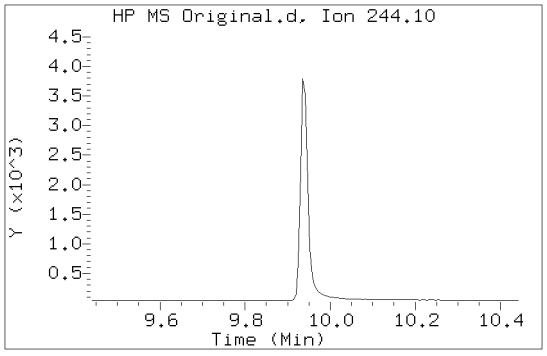


4-Terphenyl-d14 (1718-51-0)

Reason Code:

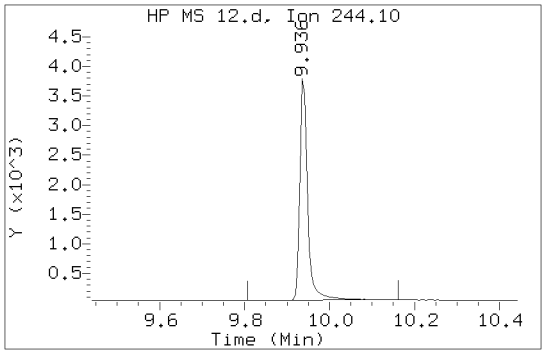
BEFORE

MASS
244.1
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
244.1
AREA
4769
HEIGHT
3744
14-Aug-2023
14:56
ALSHS
Ser



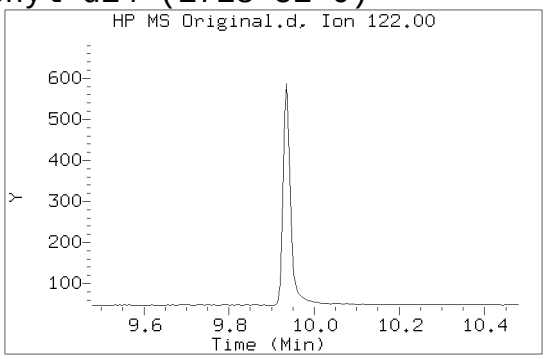
Data File : \\nahstws005\target\chem\sv6.i\230810.b\12.d
Inj Date : 10-AUG-2023 13:06
InstruID : SV6.i
LabSampID : 1 4DX-CCV END

4-Terphenyl-d14 (1718-51-0)

Reason Code:

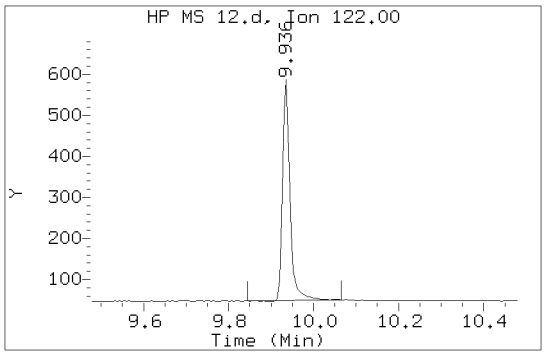
BEFORE

MASS
122
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



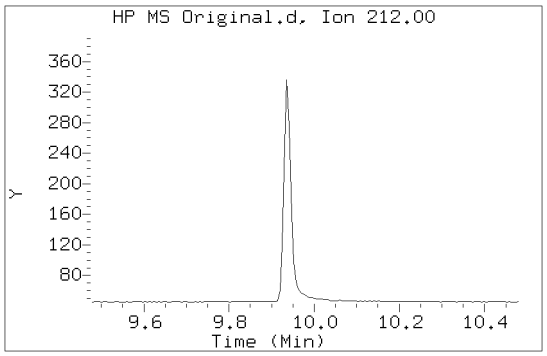
AFTER

MASS
122
AREA
651
HEIGHT
538
14-Aug-2023
14:56
ALSHS
Ser



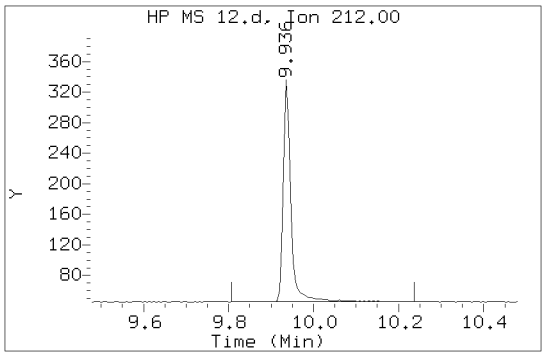
BEFORE

MASS
212
AREA
0
HEIGHT
0
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
212
AREA
356
HEIGHT
290
14-Aug-2023
14:56
ALSHS
Ser

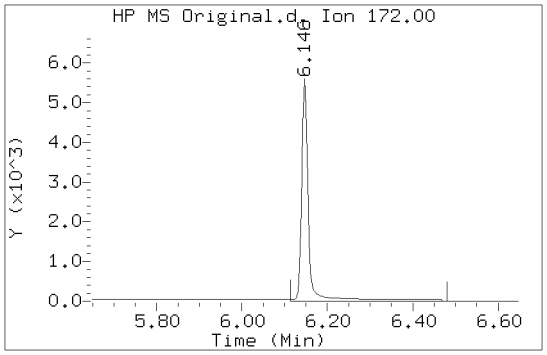


2-Fluorobiphenyl (321-60-8)

Reason Code:

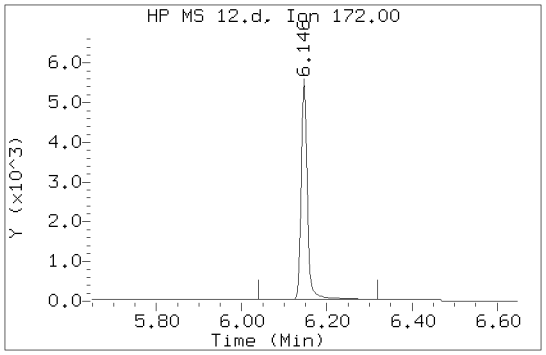
BEFORE

MASS
172
AREA
6655
HEIGHT
5599
10-Aug-2023
13:21
ALSHS
Server



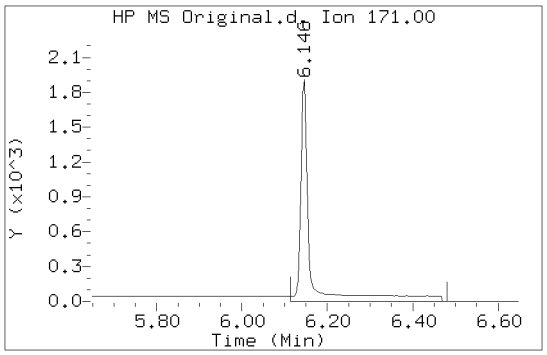
AFTER

MASS
172
AREA
5531
HEIGHT
5550
14-Aug-2023
14:56
ALSHS
Ser



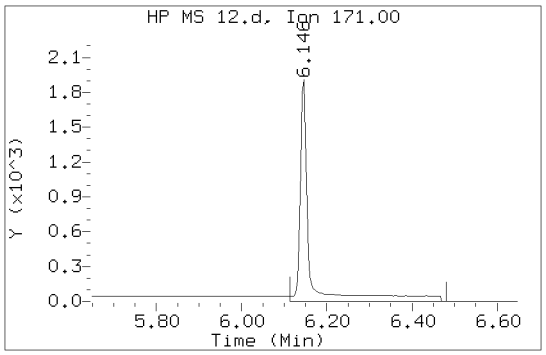
BEFORE

MASS
171
AREA
2905
HEIGHT
1909
10-Aug-2023
13:21
ALSHS
Server



AFTER

MASS
171
AREA
2905
HEIGHT
1909
14-Aug-2023
14:56
ALSHS
Ser



HS23080101 - ME - ICP_W_DOD

ALS WO# HS23080101

ALS Houston, US

Date: 09-Aug-23

Form 11 - INTERNAL STANDARD ASSOCIATION

Client: Bhate Environmental Associates, Inc.

Instrument:ICPMS05

Project: Longhorn GW Treatment Plant Monthly Effluent Samples

WorkOrder: HS23080101

Mass	Analyte	Assoc Int Standard 1	Assoc Int Standard 2	Mode
9	Beryllium	Lithium		Ar
11	Boron	Lithium		Ar
23	Sodium	Germanium		ArHe
24	Magnesium	Germanium		ArHe
27	Aluminum	Germanium		ArHe
39	Potassium	Germanium		ArHe
44	Calcium	Germanium		Ar
47	Titanium	Germanium		Ar
51	Vanadium	Germanium		ArHe
52	Chromium	Germanium		ArHe
55	Manganese	Germanium		ArHe
56	Iron	Germanium		ArHe
59	Cobalt	Germanium		ArHe
60	Nickel	Germanium		ArHe
63	Copper	Germanium		ArHe
66	Zinc	Germanium		ArHe
75	Arsenic	Germanium		ArHe
82	Selenium	Germanium		Ar
88	Strontium	Indium		Ar
95	Molybdenum	Indium		Ar
105	Palladium	Germanium		Ar
107	Silver	Indium		Ar
114	Cadmium	Indium		Ar
118	Tin	Indium		Ar
121	Antimony	Germanium		ArHe
137	Barium	Indium		Ar
205	Thallium	Bismuth		Ar
208	Lead	Bismuth		Ar

ALS Houston, US

Date: 09-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101
Start Date: 04-Aug-2023 End Date: 05-Aug-2023

Run ID:ICPMS05_443258
Instrument:ICPMS05
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS05_443258_Tune	1	04-Aug-2023 00:00	ICPMS05_443258_Tune_1	
CAL BLK	1	04-Aug-2023 10:35	014CALB.d_7473776	AG BA PB SE
2/10/200	1	04-Aug-2023 10:37	015CALS.d_7473777	AG BA PB SE
5/25/500	1	04-Aug-2023 10:39	016CALS.d_7473778	AG BA PB SE
10/50/1000	1	04-Aug-2023 10:41	017CALS.d_7473779	AG BA PB SE
100/500/10K	1	04-Aug-2023 10:43	018CALS.d_7473780	AG BA PB SE
200/1000/20K	1	04-Aug-2023 10:45	019CALS.d_7473781	AG BA PB SE
ICV	1	04-Aug-2023 10:53	021_ICV.d_7473783	AG BA PB SE
LLICV2	1	04-Aug-2023 10:57	023LCV2.d_7473785	AG BA PB SE
LLICV5	1	04-Aug-2023 10:59	024LCV5.d_7473786	AG BA PB SE
ICB	1	04-Aug-2023 11:04	026_ICB.d_7473788	AG BA PB SE
ICSA	1	04-Aug-2023 11:11	028ICSA.d_7473790	AG BA PB SE
ICSAB	1	04-Aug-2023 11:13	029ICSB.d_7473791	AG BA PB SE
CAL BLK	1	04-Aug-2023 21:40	267CALB.d_7474722	AG BA PB SE
2/10/200	1	04-Aug-2023 21:42	268CALS.d_7474723	AG BA PB SE
5/25/500	1	04-Aug-2023 21:44	269CALS.d_7474724	AG BA PB SE
10/50/1000	1	04-Aug-2023 21:46	270CALS.d_7474725	AG BA PB SE
100/500/10K	1	04-Aug-2023 21:49	271CALS.d_7474726	AG BA PB SE
200/1000/20K	1	04-Aug-2023 21:51	272CALS.d_7474727	AG BA PB SE
LLICCV2	1	04-Aug-2023 21:57	275LCV2.d_7474729	AG BA PB SE
LLICCV5	1	04-Aug-2023 21:59	276LCV5.d_7474730	AG BA PB SE
ICV	1	04-Aug-2023 22:01	277_ICV.d_7474720	AG BA PB SE
ICCB 1	1	04-Aug-2023 22:03	278_ICB.d_7474721	AG BA PB SE
CCV 1	1	04-Aug-2023 22:08	280_CCV.d_7474732	AG BA PB SE
CCB 2	1	04-Aug-2023 22:10	281_CCB.d_7474733	AG BA PB SE
CCV 2	1	04-Aug-2023 22:26	289_CCV.d_7474741	AG BA PB SE
CCB 3	1	04-Aug-2023 22:28	290_CCB.d_7474742	AG BA PB SE
CCV 3	1	04-Aug-2023 22:41	296_CCV.d_7474748	AG BA PB SE
CCB 4	1	04-Aug-2023 22:43	297_CCB.d_7474749	AG BA PB SE
CCV 4	1	04-Aug-2023 22:57	304_CCV.d_7474756	AG BA PB SE
CCB 5	1	04-Aug-2023 23:00	305_CCB.d_7474757	AG BA PB SE
CCV 5	1	04-Aug-2023 23:19	314_CCV.d_7474766	AG BA PB SE
CCB 6	1	04-Aug-2023 23:21	315_CCB.d_7474767	AG BA PB SE
LCS-198597	1	04-Aug-2023 23:25	317SMPL.d_7474769	AG BA PB SE
ZZZZZZSD	5	04-Aug-2023 23:29	319SMPL.d_7474771	AG BA PB SE
ZZZZZZMS	1	04-Aug-2023 23:32	320SMPL.d_7474772	AG BA PB SE
ZZZZZZMSD	1	04-Aug-2023 23:34	321SMPL.d_7474773	AG BA PB SE
ZZZZZZPDS	1	04-Aug-2023 23:36	322SMPL.d_7474774	AG BA PB SE
CCV 6	1	04-Aug-2023 23:38	323_CCV.d_7474775	AG BA PB SE
CCB 7	1	04-Aug-2023 23:40	324_CCB.d_7474776	AG BA PB SE
CCV 7	1	04-Aug-2023 23:57	332_CCV.d_7474784	AG BA PB SE
CCB 8	1	05-Aug-2023 00:00	333_CCB.d_7474785	AG BA PB SE
LH18/24-SP650_080123	1	05-Aug-2023 00:13	339SMPL.d_7474791	AG BA PB SE
CCV 8	1	05-Aug-2023 00:24	344_CCV.d_7474796	AG BA PB SE
CCB 9	1	05-Aug-2023 00:26	345_CCB.d_7474797	AG BA PB SE
CCV 9	1	05-Aug-2023 00:28	346_CCV.d_7474798	AG BA PB SE
CCB 10	1	05-Aug-2023 00:31	347_CCB.d_7474799	AG BA PB SE
LLICV2	1	05-Aug-2023 00:35	349LCV2.d_7474801	AG BA PB SE
LLICV5	1	05-Aug-2023 00:37	350LCV5.d_7474802	AG BA PB SE
ICSA	1	05-Aug-2023 00:40	351ICSA.d_7474803	AG BA PB SE

ALS Houston, US

Date: 09-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101
Start Date: 04-Aug-2023 End Date: 05-Aug-2023

Run ID:ICPMS05_443258
Instrument:ICPMS05
Method:

Sample No.	D/F	Time	FileID	Analytes
ICSAB	1	05-Aug-2023 00:42	352ICSB.d_7474804	AG BA PB SE

ALS Houston, US

Date: 09-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101
Start Date: 07-Aug-2023 End Date: 07-Aug-2023

Run ID:ICPMS06_443328
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_443328_Tune	1	07-Aug-2023 00:00	ICPMS06_443328_Tune_1	
CAL BLK	1	07-Aug-2023 12:22	015CALB.d_7475813	AG BA PB SE
2/10/200	1	07-Aug-2023 12:24	016CALS.d_7475814	AG BA PB SE
5/25/500	1	07-Aug-2023 12:26	017CALS.d_7475815	AG BA PB SE
10/50/100	1	07-Aug-2023 12:28	018CALS.d_7475816	AG BA PB SE
100/500/10K	1	07-Aug-2023 12:30	019CALS.d_7475817	AG BA PB SE
200/1000/20K	1	07-Aug-2023 12:32	020CALS.d_7475818	AG BA PB SE
LLICV2	1	07-Aug-2023 12:48	024LCV2.d_7475822	AG BA PB SE
LLICV5	1	07-Aug-2023 12:50	025LCV5.d_7475823	AG BA PB SE
ICB	1	07-Aug-2023 12:51	026_ICB.d_7475824	AG BA PB SE
ICV	1	07-Aug-2023 12:53	027_ICV.d_7475825	AG BA PB SE
ICSA	1	07-Aug-2023 12:59	029ICSA.d_7475841	AG BA PB SE
ICSAB	1	07-Aug-2023 13:01	030ICSB.d_7475839	AG BA PB SE
CCV 1	1	07-Aug-2023 13:09	033_CCV.d_7475856	AG BA PB SE
CCB 1	1	07-Aug-2023 13:10	034_CCB.d_7475857	AG BA PB SE
MBLK-198597	1	07-Aug-2023 13:13	035SMPL.d_7475858	AG BA PB SE
LCS-198597	1	07-Aug-2023 13:15	036SMPL.d_7475859	
ZZZZZZSD	5	07-Aug-2023 13:19	038SMPL.d_7475861	
ZZZZZZMS	1	07-Aug-2023 13:21	039SMPL.d_7475862	
ZZZZZZMSD	1	07-Aug-2023 13:23	040SMPL.d_7475863	
ZZZZZZPDS	1	07-Aug-2023 13:25	041SMPL.d_7475864	
CCV 2	1	07-Aug-2023 13:31	044_CCV.d_7475867	AG BA PB SE
CCB 2	1	07-Aug-2023 13:33	045_CCB.d_7475868	AG BA PB SE

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Date: 09-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

ICV | Date: 04-Aug-2023 10:53 | Seq: 7473783 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	99.408	99	90-110	
Lead	100	98.912	99	90-110	
Selenium	100	100.984	101	90-110	
Silver	100	101.501	102	90-110	

ICV | Date: 04-Aug-2023 22:01 | Seq: 7474720 | ICV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.676	101	90-110	
Lead	100	101.075	101	90-110	
Selenium	100	102.481	102	90-110	
Silver	100	101.903	102	90-110	

CCV1 | Date: 04-Aug-2023 22:08 | Seq: 7474732 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.614	101	90-110	
Lead	100	101.603	102	90-110	
Selenium	100	105.359	105	90-110	
Silver	100	117.862	118	90-110	S

CCV2 | Date: 04-Aug-2023 22:26 | Seq: 7474741 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	102.51	103	90-110	
Lead	100	102.026	102	90-110	
Selenium	100	104.354	104	90-110	
Silver	100	118.865	119	90-110	S

CCV3 | Date: 04-Aug-2023 22:41 | Seq: 7474748 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	101.267	101	90-110	
Lead	100	101.142	101	90-110	
Selenium	100	103.269	103	90-110	
Silver	100	117.5	118	90-110	S

CCV4 | Date: 04-Aug-2023 22:57 | Seq: 7474756 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.255	100	90-110	
Lead	100	100.152	100	90-110	
Selenium	100	102.829	103	90-110	
Silver	100	116.306	116	90-110	S

CCV5 | Date: 04-Aug-2023 23:19 | Seq: 7474766 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.614	101	90-110	
Lead	100	101.249	101	90-110	
Selenium	100	101.975	102	90-110	
Silver	100	100.684	101	90-110	

CCV6 | Date: 04-Aug-2023 23:38 | Seq: 7474775 | CCV | Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	101.495	101	90-110	
Lead	100	100.806	101	90-110	
Selenium	100	104.994	105	90-110	
Silver	100	100.2	100	90-110	

ALS Houston, US

Date: 09-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

CCV7 Date: 04-Aug-2023 23:57 Seq: 7474784 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.079	100	90-110	
Lead	100	100.356	100	90-110	
Selenium	100	102.189	102	90-110	
Silver	100	99.146	99	90-110	

CCV8 Date: 05-Aug-2023 00:24 Seq: 7474796 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.903	101	90-110	
Lead	100	98.812	99	90-110	
Selenium	100	100.71	101	90-110	
Silver	100	99.899	100	90-110	

CCV9 Date: 05-Aug-2023 00:28 Seq: 7474798 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Barium	100	100.877	101	90-110	
Lead	100	99.63	100	90-110	
Selenium	100	100.88	101	90-110	
Silver	100	99.52	100	90-110	

ALS Houston, US

Date: 09-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS06_443328
Instrument: ICPMS06
Method: SW6020A

ICV	Date: 07-Aug-2023 12:53		Seq: 7475825	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Barium	100	101.687	102	90-110	
Lead	100	101.172	101	90-110	
Selenium	100	101.591	102	90-110	
Silver	100	99.891	100	90-110	

CCV1	Date: 07-Aug-2023 13:09		Seq: 7475856	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Barium	100	99.16	99	90-110	
Lead	100	99.894	100	90-110	
Selenium	100	100.109	100	90-110	
Silver	100	99.066	99	90-110	

CCV2	Date: 07-Aug-2023 13:31		Seq: 7475867	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Barium	100	99.647	100	90-110	
Lead	100	96.878	97	90-110	
Selenium	100	94.892	95	90-110	
Silver	100	98.727	99	90-110	

ALS Houston, US Date: 09-Aug-23

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

ICB	Date: 04-Aug-2023 11:04		Seq: 7473788	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	5	1.9	5	U	
Lead	5	0.6	5	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	

ICCB1	Date: 04-Aug-2023 22:03		Seq: 7474721	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	5	1.9	5	U	
Lead	5	0.6	5	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	

CCB2	Date: 04-Aug-2023 22:10		Seq: 7474733	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB3	Date: 04-Aug-2023 22:28		Seq: 7474742	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB4	Date: 04-Aug-2023 22:43		Seq: 7474749	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB5	Date: 04-Aug-2023 23:00		Seq: 7474757	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB6	Date: 04-Aug-2023 23:21		Seq: 7474767	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB7	Date: 04-Aug-2023 23:40		Seq: 7474776	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

ALS Houston, US

Date: 09-Aug-23

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

CCB8	Date: 05-Aug-2023 00:00		Seq: 7474785	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB9	Date: 05-Aug-2023 00:26		Seq: 7474797	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

CCB10	Date: 05-Aug-2023 00:31		Seq: 7474799	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS06_443328
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 07-Aug-2023 12:51		Seq: 7475824	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	5	1.9	5	U	
Lead	5	0.6	5	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	

CCB1	Date: 07-Aug-2023 13:10		Seq: 7475857	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

MBLK-198597	Date: 07-Aug-2023 13:13		Seq: 7475858	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	5	1.9	5	U	
Lead	5	0.6	5	U	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	

CCB2	Date: 07-Aug-2023 13:33		Seq: 7475868	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Barium	4	1.9	4	U	
Lead	2	0.6	2	U	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

ALS Houston, US Date: 09-Aug-23

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc. Run ID:ICPMS05_443258
Project: Longhorn GW Treatment Plant Monthly Effluent Samples Instrument:ICPMS05
WorkOrder: HS23080101 Method:SW6020A

ICSA	Date: 04-Aug-2023 11:11	Seq: 7473790	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Barium		0.753	0	
Lead		0.339	0	
Selenium		0.06	0	
Silver		0.191	0	
ICSAB	Date: 04-Aug-2023 11:13	Seq: 7473791	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Barium	100	105.5	105	
Lead	100	103.8	104	
Selenium	100	106.5	107	
Silver	100	99.5	99.5	
ICSA	Date: 05-Aug-2023 00:40	Seq: 7474803	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Barium		0.691	0	
Lead		0.175	0	
Selenium		0.095	0	
Silver		0.163	0	
ICSAB	Date: 05-Aug-2023 00:42	Seq: 7474804	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Barium	100	104.5	105	
Lead	100	100.1	100	
Selenium	100	102.6	103	
Silver	100	94.98	95.0	

ALS Houston, US

Date: 09-Aug-23

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Run ID: ICPMS06_443328
Instrument: ICPMS06
Method: SW6020A

ICSAB	Date: 07-Aug-2023 13:01	Seq: 7475839	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Barium	100	101.3	101	
Lead	100	99.12	99.1	
Selenium	100	103.3	103	
Silver	100	96.54	96.5	

ICSA	Date: 07-Aug-2023 12:59	Seq: 7475841	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Barium		0.704	0	
Lead		0.217	0	
Selenium		-0.09	0	
Silver		0.175	0	

ALS Houston, US Date: 09-Aug-23

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Date Analyzed: 04-Aug-2023 23:34
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Matrix Spike: HS23071878-02MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Barium	224.1	274.1	50.00	100	286.5	50.00	125	86-114	4.44	20
Lead	0.7960	49.21	50.00	96.8	52.17	50.00	103	88-115	5.84	20
Selenium	5.000	52.57	50.00	104	56.62	50.00	112	80-120	7.41	20
Silver	5.000	46.59	50.00	93.0	48.15	50.00	96.1	85-116	3.31	20

ALS Houston, US

Date: 09-Aug-23

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Date Analyzed: 04-Aug-2023 23:36
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Lab Sample ID: HS23071878-02PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Barium	224.1	321.6	100	98	80-120
Lead	0.796	105.6	100	105	80-120
Selenium	0	112.9	100	112	80-120
Silver	0	82.95	100	83	80-120

ALS Houston, US Date: 09-Aug-23

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Date Analyzed: 04-Aug-2023 23:25
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Lab Sample ID: LCS-198597 Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Barium	50	46.36	93	86-114
Lead	50	45.11	90	88-115
Selenium	50	50.16	100	80-120
Silver	50	46.12	92	85-116

ALS Houston, US

Date: 09-Aug-23

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Effluent Samples
WorkOrder: HS23080101

Date Analyzed: 04-Aug-2023 23:29
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Lab Sample ID: HS23071878-02SD
Client Sample ID:

Analysis Method: SW6020A

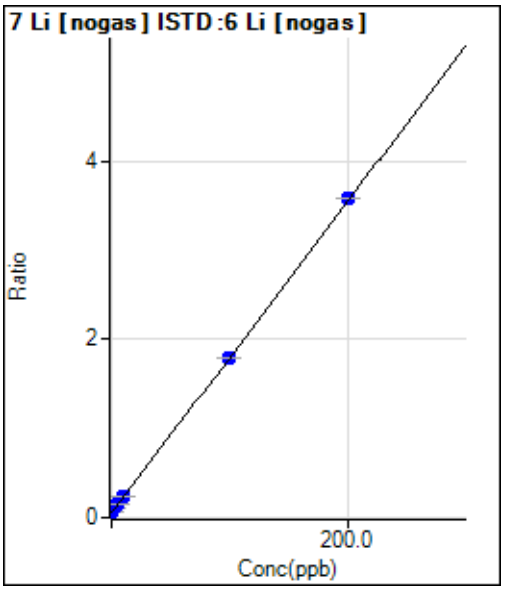
Analyte	Sample Result	C	SD Result	C	RPD	Q
Barium	224.1		227		1	
Lead	0.796	J	0	U	0	
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	

Calibration for 277_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 10:02:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	267CALB.d	CAL BLK	8/4/2023 9:40:48 PM
2	268CALS.d	2/10/200	8/4/2023 9:42:51 PM
3	269CALS.d	5/25/500	8/4/2023 9:44:54 PM
4	270CALS.d	10/50/1000	8/4/2023 9:46:58 PM
5	271CALS.d	100/500/10K	8/4/2023 9:49:02 PM
6	272CALS.d	200/1000/20K	8/4/2023 9:51:05 PM
7			

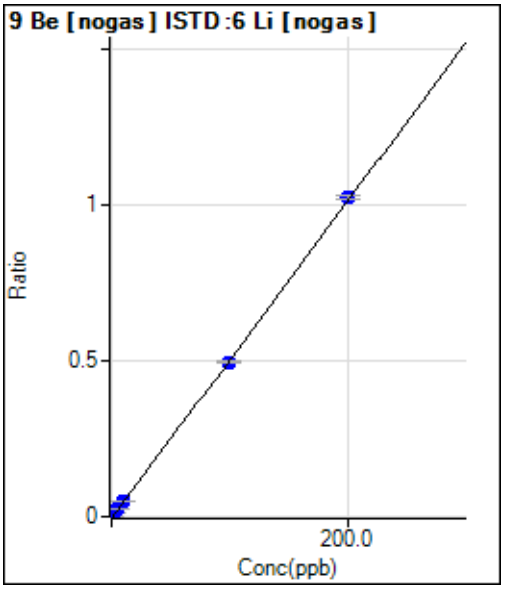
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	72235.98	0.0709	P	1.4	
2	☐	2.000	1.919	106105.85	0.1044	P	0.9	-4.0
3	☐	5.000	4.642	154599.31	0.1520	P	0.6	-7.2
4	☐	10.000	9.363	238160.22	0.2346	P	0.3	-6.4
5	☐	100.000	98.271	1746894.61	1.7887	P	0.6	-1.7
6	☐	200.000	200.906	3321127.45	3.5829	P	0.5	0.5
7	☐	1.000						

y = 0.0175 * x + 0.0709
R = 0.9999
DL = 0.1646 ppb
BEC = 4.055 ppb

Weight: <None>
Min Conc: <None>

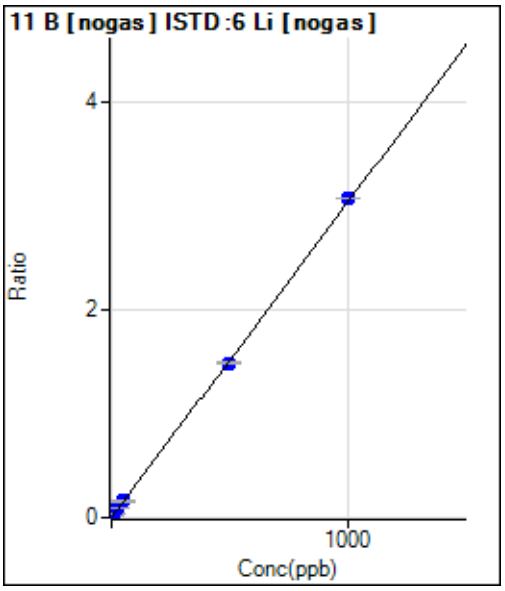


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	31.67	0.0000	P	8.8	
2	☐	2.000	1.869	9704.77	0.0096	P	1.1	-6.6
3	☐	5.000	4.606	23888.41	0.0235	P	1.8	-7.9
4	☐	10.000	9.246	47856.46	0.0471	P	0.8	-7.5
5	☐	100.000	97.462	484890.70	0.4965	P	0.9	-2.5
6	☐	200.000	201.318	950659.07	1.0256	P	0.6	0.7
7	☐	1.000						

y = 0.0051 * x + 3.1065E-005
R = 0.9999
DL = 0.00161 ppb
BEC = 0.006098 ppb

Weight: <None>
Min Conc: <None>

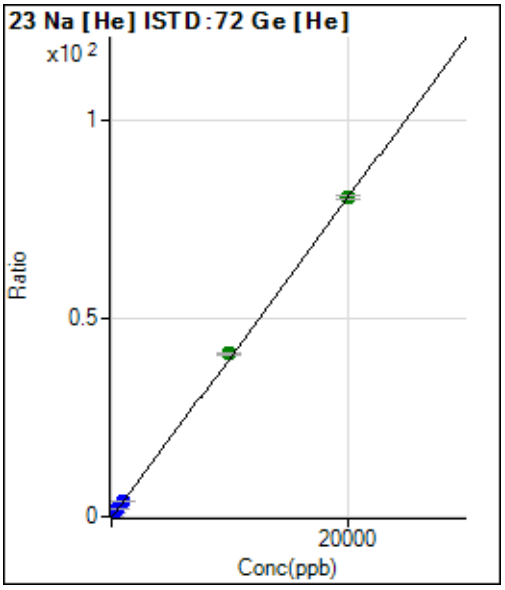
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18929.94	0.0186	P	1.3	
2	☐	10.000	8.988	46577.79	0.0458	P	1.2	-10.1
3	☐	25.000	22.445	88127.75	0.0867	P	1.4	-10.2
4	☐	50.000	45.899	160234.73	0.1578	P	1.0	-8.2
5	☐	500.000	484.585	1453897.95	1.4886	P	1.6	-3.1
6	☐	1000.000	1007.986	2851901.42	3.0765	P	0.5	0.8
7	☐	5.000						

y = 0.0030 * x + 0.0186
R = 0.9998
DL = 0.2406 ppb
BEC = 6.123 ppb

Weight: <None>
Min Conc: <None>

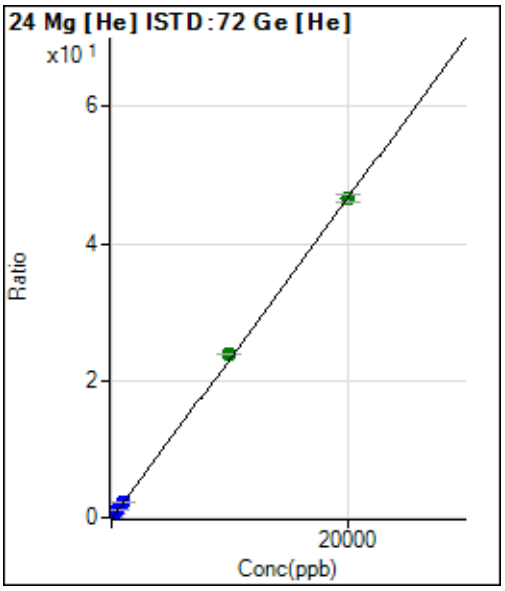


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43989.63	0.0948	P	1.3	
2	☐	200.000	193.057	408418.26	0.8747	P	0.6	-3.5
3	☐	500.000	473.326	942210.51	2.0070	P	0.4	-5.3
4	☐	1000.000	937.750	1856720.28	3.8832	P	0.3	-6.2
5	☐	10000.00	10151.19	19815026.37	41.1051	A	1.5	1.5
6	☐	20000.00	19928.24	38875996.92	80.6038	A	0.6	-0.4
7	☐	100.000						

y = 0.0040 * x + 0.0948
R = 1.0000
DL = 0.9354 ppb
BEC = 23.46 ppb

Weight: <None>
Min Conc: <None>

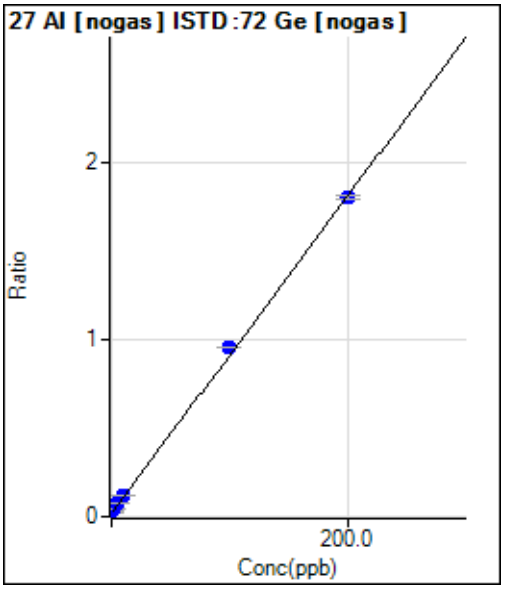
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	666.69	0.0014	P	9.7	
2	☐	200.000	191.582	210274.94	0.4503	P	0.7	-4.2
3	☐	500.000	469.657	517288.72	1.1019	P	0.7	-6.1
4	☐	1000.000	926.985	1039198.19	2.1735	P	0.9	-7.3
5	☐	10000.00	10216.08	11541071.50	23.9390	A	0.5	2.2
6	☐	20000.00	19896.45	22486236.33	46.6214	A	1.9	-0.5
7	☐	100.000						

y = 0.0023 * x + 0.0014
R = 0.9999
DL = 0.1787 ppb
BEC = 0.6126 ppb

Weight: <None>
Min Conc: <None>

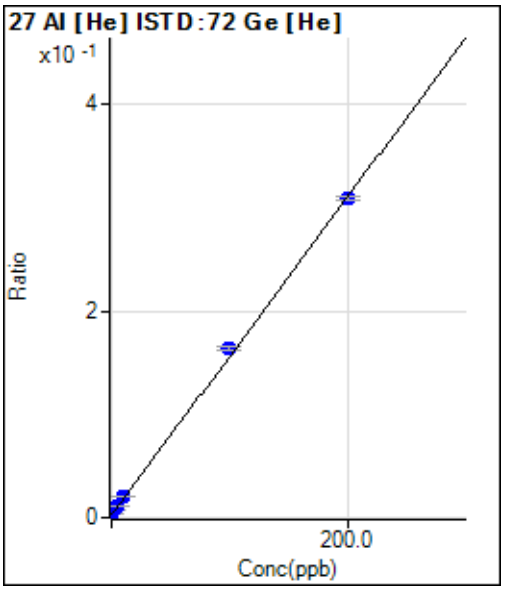


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	34089.35	0.0275	P	19.	
2	☐	2.000	1.840	54747.42	0.0439	P	1.2	-8.0
3	☐	5.000	4.969	89700.38	0.0719	P	1.2	-0.6
4	☐	10.000	10.446	151987.49	0.1210	P	1.6	4.5
5	☐	100.000	103.771	1247283.55	0.9565	P	0.2	3.8
6	☐	200.000	198.095	2337278.40	1.8009	P	1.5	-1.0
7	☐	1.000						

y = 0.0090 * x + 0.0275
R = 0.9997
DL = 1.809 ppb
BEC = 3.068 ppb

Weight: <None>
Min Conc: <None>

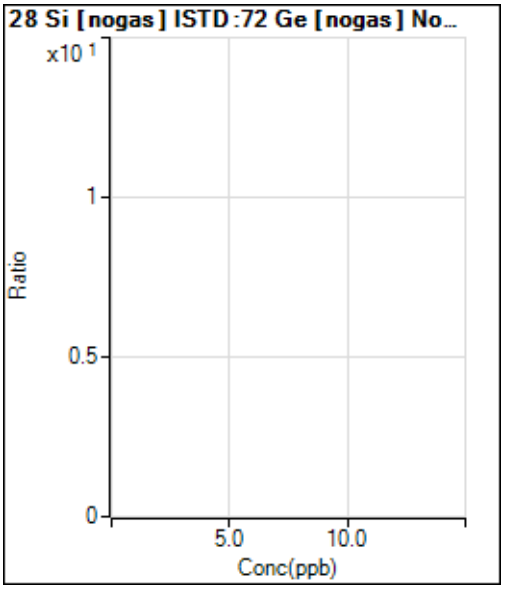
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1876.82	0.0040	P	12.	
2	☐	2.000	2.297	3543.80	0.0076	P	7.0	14.8
3	☐	5.000	4.808	5381.03	0.0115	P	1.8	-3.8
4	☐	10.000	10.886	9963.37	0.0208	P	2.1	8.9
5	☐	100.000	104.019	79287.91	0.1645	P	1.9	4.0
6	☐	200.000	197.948	149201.20	0.3094	P	1.0	-1.0
7	☐	1.000						

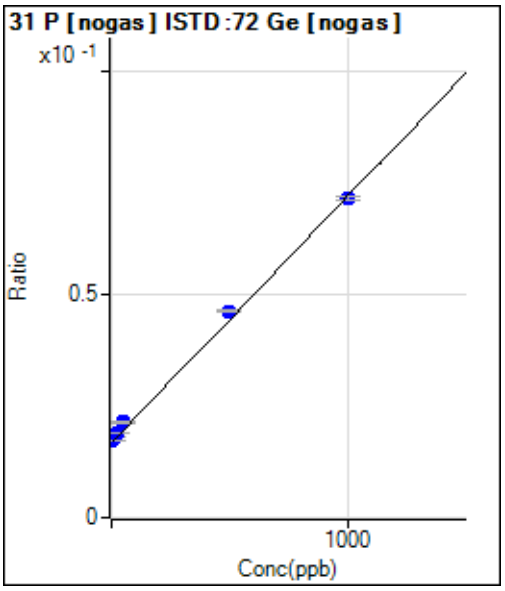
y = 0.0015 * x + 0.0040
R = 0.9997
DL = 0.9773 ppb
BEC = 2.623 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

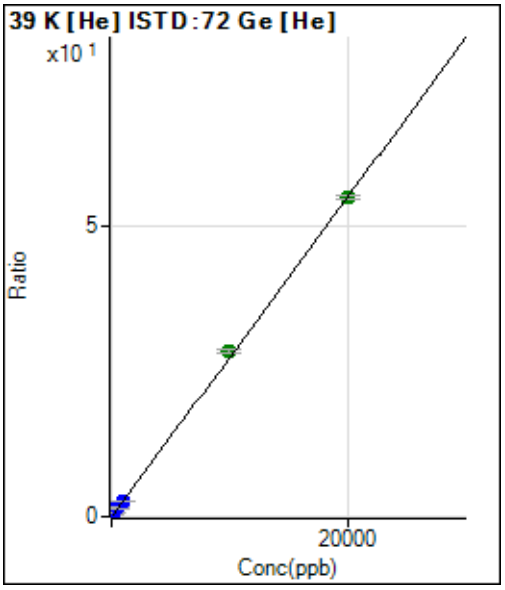
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21381.88	0.0172	P	2.0	
2	☐	10.000	9.396	22082.86	0.0177	P	4.8	-6.0
3	☐	25.000	31.006	23588.51	0.0189	P	1.6	24.0
4	☐	50.000	75.878	26882.01	0.0214	P	0.7	51.8
5	☐	500.000	527.136	60345.60	0.0463	P	0.6	5.4
6	☐	1000.000	984.994	92850.21	0.0715	P	0.9	-1.5
7	☐	5.000						

y = 5.5150E-005 * x + 0.0172
R = 0.9993
DL = 18.51 ppb
BEC = 312.1 ppb

Weight: <None>
Min Conc: <None>

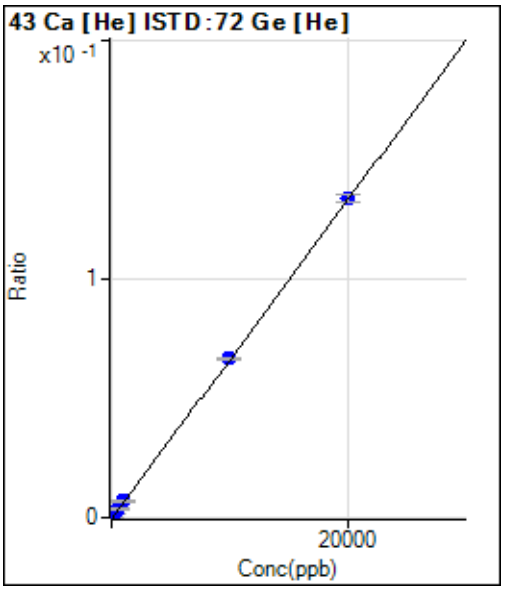


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	111020.85	0.2392	P	1.1	
2	☐	200.000	185.557	350613.16	0.7509	P	0.1	-7.2
3	☐	500.000	455.367	701825.12	1.4950	P	0.7	-8.9
4	☐	1000.000	895.879	1295594.95	2.7098	P	1.2	-10.4
5	☐	10000.00	10242.56	13731372.71	28.4851	A	1.8	2.4
6	☐	20000.00	19885.18	26563005.44	55.0766	A	1.2	-0.6
7	☐	100.000						

y = 0.0028 * x + 0.2392
R = 0.9999
DL = 2.878 ppb
BEC = 86.74 ppb

Weight: <None>
Min Conc: <None>

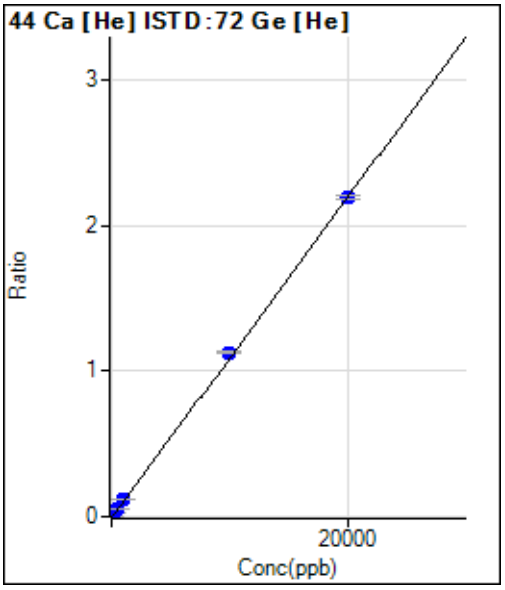
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	45.	
2	☐	200.000	208.819	686.69	0.0015	P	7.1	4.4
3	☐	500.000	525.573	1686.79	0.0036	P	4.1	5.1
4	☐	1000.000	1028.916	3330.43	0.0070	P	4.4	2.9
5	☐	10000.00	9985.817	32288.12	0.0670	P	1.1	-0.1
6	☐	20000.00	20004.91	64680.77	0.1341	P	2.6	0.0
7	☐	100.000						

y = 6.6998E-006 * x + 7.1641E-005
R = 1.0000
DL = 14.49 ppb
BEC = 10.69 ppb

Weight: <None>
Min Conc: <None>

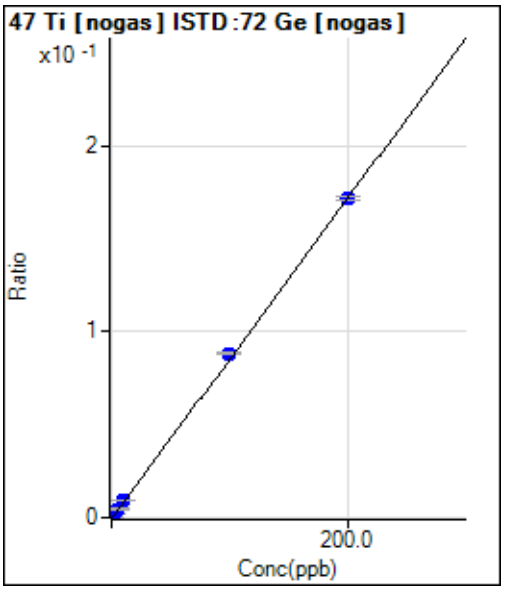


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0017	P	2.7	
2	☐	200.000	207.646	11494.56	0.0246	P	2.2	3.8
3	☐	500.000	520.751	27765.89	0.0591	P	0.8	4.2
4	☐	1000.000	1027.409	54989.62	0.1150	P	1.7	2.7
5	☐	10000.00	10201.25	543091.01	1.1266	P	1.3	2.0
6	☐	20000.00	19897.40	1059034.78	2.1958	P	0.8	-0.5
7	☐	100.000						

y = 1.1027E-004 * x + 0.0017
R = 0.9999
DL = 1.257 ppb
BEC = 15.63 ppb

Weight: <None>
Min Conc: <None>

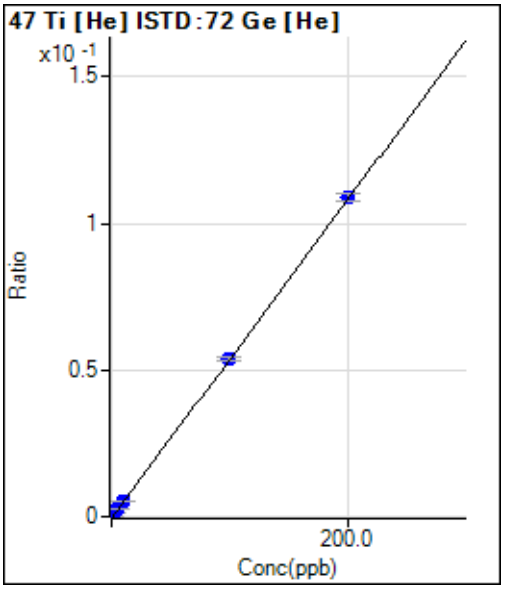
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	163.34	0.0001	P	24.	
2	☐	2.000	2.012	2323.55	0.0019	P	8.3	0.6
3	☐	5.000	5.146	5691.20	0.0046	P	3.8	2.9
4	☐	10.000	10.279	11294.37	0.0090	P	2.5	2.8
5	☐	100.000	102.011	114781.37	0.0880	P	1.3	2.0
6	☐	200.000	198.977	222668.00	0.1716	P	1.8	-0.5
7	☐	1.000						

y = 8.6167E-004 * x + 1.3151E-004
R = 0.9999
DL = 0.1142 ppb
BEC = 0.1526 ppb

Weight: <None>
Min Conc: <None>

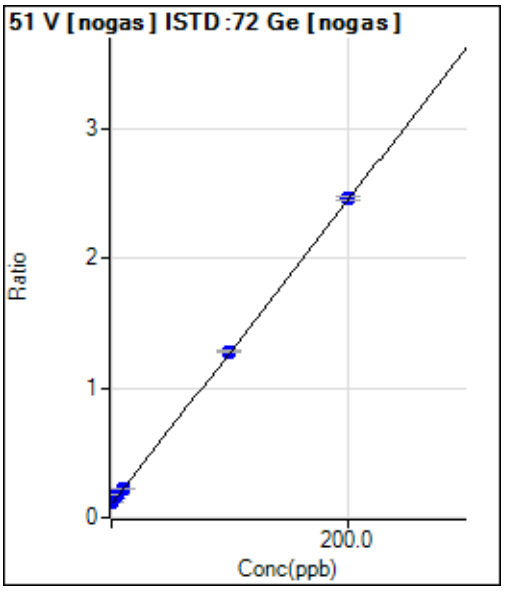


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	1.1	
2	☐	2.000	2.233	576.69	0.0012	P	29.	11.7
3	☐	5.000	5.173	1330.08	0.0028	P	0.9	3.5
4	☐	10.000	9.724	2536.92	0.0053	P	8.7	-2.8
5	☐	100.000	99.167	25992.60	0.0539	P	2.1	-0.8
6	☐	200.000	200.423	52548.16	0.1090	P	2.3	0.2
7	☐	1.000						

y = 5.4352E-004 * x + 2.1546E-005
R = 1.0000
DL = 0.001255 ppb
BEC = 0.03964 ppb

Weight: <None>
Min Conc: <None>

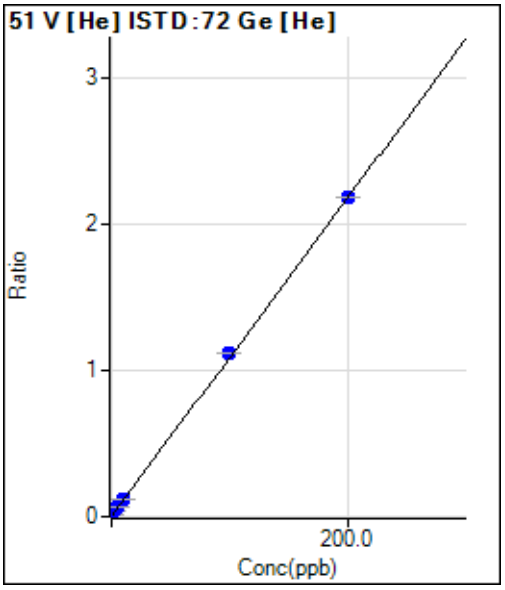
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143612.65	0.1156	P	1.5	
2	☐	2.000	2.313	177857.83	0.1428	P	1.3	15.7
3	☐	5.000	4.940	216416.21	0.1736	P	1.3	-1.2
4	☐	10.000	9.419	284125.38	0.2262	P	1.1	-5.8
5	☐	100.000	99.348	1670690.65	1.2815	P	1.5	-0.7
6	☐	200.000	200.353	3201687.24	2.4669	P	1.2	0.2
7	☐	1.000						

y = 0.0117 * x + 0.1156
R = 1.0000
DL = 0.4533 ppb
BEC = 9.851 ppb

Weight: <None>
Min Conc: <None>

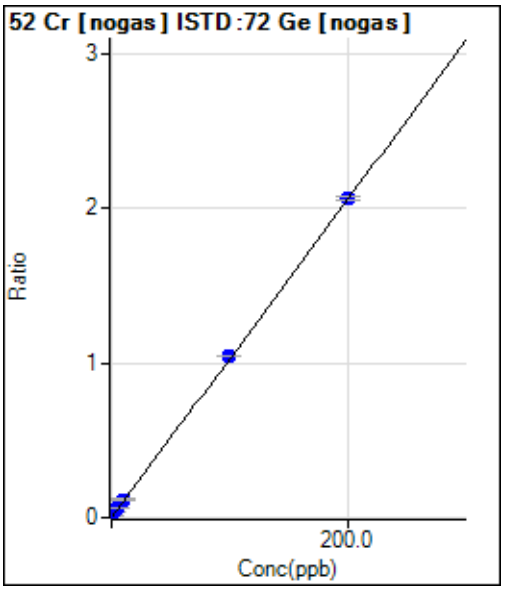


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6394.72	0.0138	P	3.0	
2	☐	2.000	2.102	17106.36	0.0366	P	0.8	5.1
3	☐	5.000	4.951	31740.93	0.0676	P	1.8	-1.0
4	☐	10.000	9.848	57788.56	0.1209	P	1.2	-1.5
5	☐	100.000	101.457	538470.81	1.1170	P	0.9	1.5
6	☐	200.000	199.279	1051733.47	2.1806	P	0.4	-0.4
7	☐	1.000						

y = 0.0109 * x + 0.0138
R = 1.0000
DL = 0.1155 ppb
BEC = 1.267 ppb

Weight: <None>
Min Conc: <None>

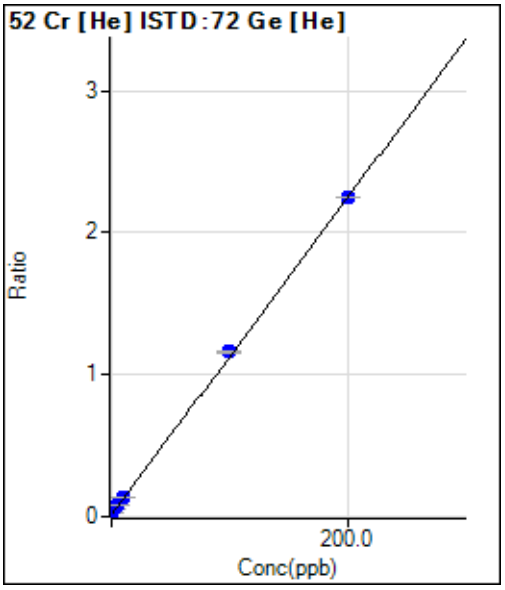
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13943.34	0.0112	P	1.7	
2	☐	2.000	2.140	41396.92	0.0332	P	1.0	7.0
3	☐	5.000	5.131	79759.70	0.0640	P	2.0	2.6
4	☐	10.000	10.300	147128.89	0.1171	P	2.3	3.0
5	☐	100.000	100.638	1363573.10	1.0457	P	0.4	0.6
6	☐	200.000	199.661	2678572.61	2.0637	P	0.9	-0.2
7	☐	1.000						

y = 0.0103 * x + 0.0112
R = 1.0000
DL = 0.0563 ppb
BEC = 1.092 ppb

Weight: <None>
Min Conc: <None>

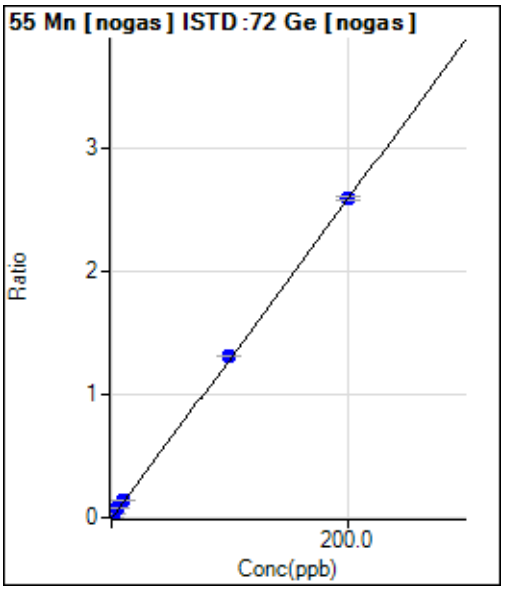


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11521.26	0.0248	P	4.0	
2	☐	2.000	2.273	23441.79	0.0502	P	0.1	13.7
3	☐	5.000	5.085	38315.42	0.0816	P	2.4	1.7
4	☐	10.000	10.253	66629.92	0.1393	P	1.3	2.5
5	☐	100.000	101.749	559862.15	1.1613	P	0.9	1.7
6	☐	200.000	199.108	1084604.38	2.2488	P	0.5	-0.4
7	☐	1.000						

y = 0.0112 * x + 0.0248
R = 0.9999
DL = 0.2638 ppb
BEC = 2.222 ppb

Weight: <None>
Min Conc: <None>

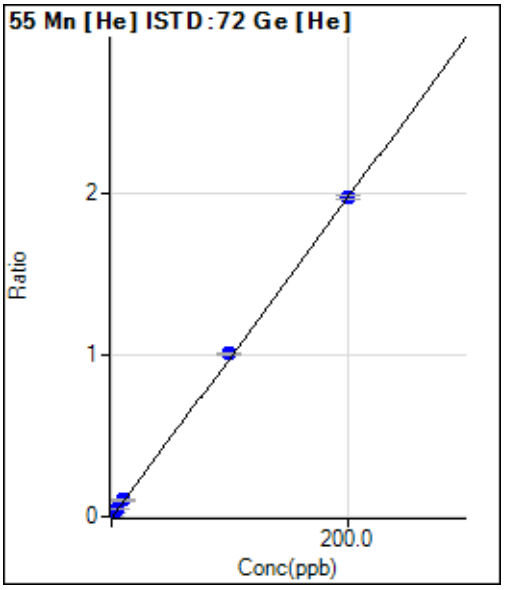
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5824.55	0.0047	P	4.8	
2	☐	2.000	2.110	40039.95	0.0321	P	2.0	5.5
3	☐	5.000	5.162	89554.35	0.0718	P	1.0	3.2
4	☐	10.000	10.363	175221.41	0.1395	P	2.0	3.6
5	☐	100.000	100.875	1716706.95	1.3167	P	0.7	0.9
6	☐	200.000	199.539	3374570.16	2.5999	P	1.0	-0.2
7	☐	1.000						

y = 0.0130 * x + 0.0047
R = 1.0000
DL = 0.05196 ppb
BEC = 0.3605 ppb

Weight: <None>
Min Conc: <None>

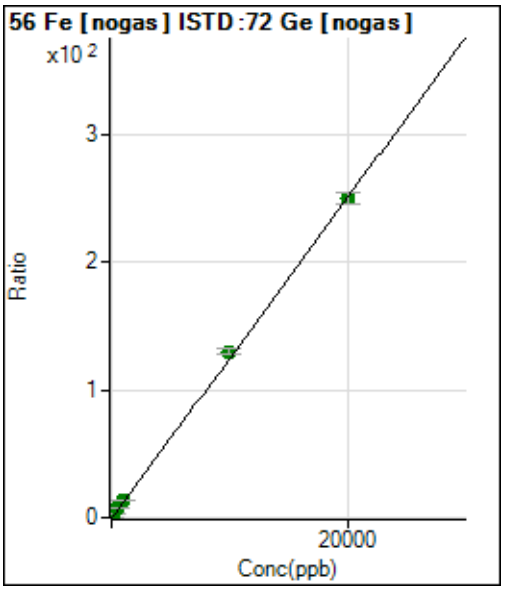


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0010	P	1.2	
2	☐	2.000	2.094	10170.26	0.0218	P	3.8	4.7
3	☐	5.000	5.130	24383.33	0.0519	P	2.0	2.6
4	☐	10.000	10.161	48742.44	0.1019	P	2.7	1.6
5	☐	100.000	101.482	486583.89	1.0092	P	0.4	1.5
6	☐	200.000	199.247	955225.33	1.9806	P	0.7	-0.4
7	☐	1.000						

y = 0.0099 * x + 9.7674E-004
R = 1.0000
DL = 0.003514 ppb
BEC = 0.09831 ppb

Weight: <None>
Min Conc: <None>

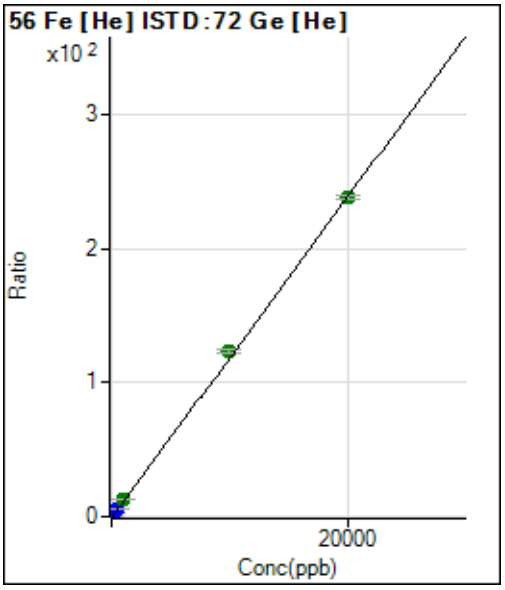
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	599942.20	0.4829	P	0.5	
2	☐	200.000	231.437	4225232.96	3.3913	A	1.0	15.7
3	☐	500.000	557.018	9329005.49	7.4828	A	1.9	11.4
4	☐	1000.000	1083.899	17719908.90	14.1039	A	0.6	8.4
5	☐	10000.00	10305.94	169390247.4	129.993	A	3.6	3.1
6	☐	20000.00	19841.09	324059628.5	249.817	A	3.3	-0.8
7	☐	100.000						

y = 0.0126 * x + 0.4829
R = 0.9998
DL = 0.5714 ppb
BEC = 38.43 ppb

Weight: <None>
Min Conc: <None>

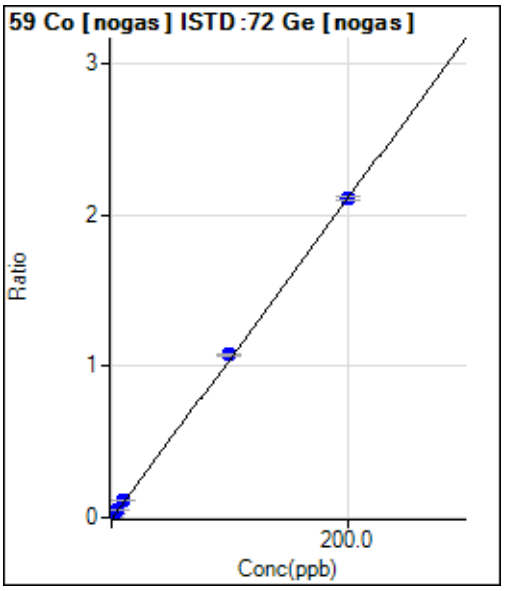


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19283.14	0.0415	P	2.4	
2	☐	200.000	183.416	1045831.65	2.2399	P	0.1	-8.3
3	☐	500.000	447.083	2535024.34	5.4000	P	1.7	-10.6
4	☐	1000.000	1067.836	6139400.53	12.8401	A	1.2	6.8
5	☐	10000.00	10263.59	59318889.12	123.055	A	2.0	2.6
6	☐	20000.00	19866.30	114857451.6	238.148	A	1.5	-0.7
7	☐	100.000						

y = 0.0120 * x + 0.0415
R = 0.9999
DL = 0.2482 ppb
BEC = 3.466 ppb

Weight: <None>
Min Conc: <None>

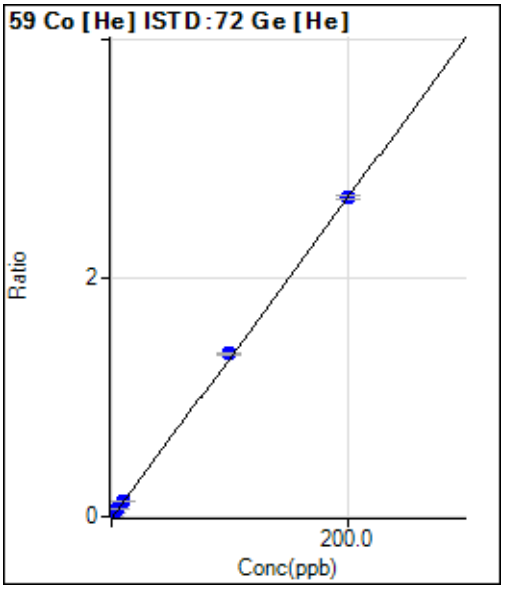
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	38.	
2	☐	2.000	2.068	27455.29	0.0220	P	1.9	3.4
3	☐	5.000	5.203	68954.55	0.0553	P	0.5	4.1
4	☐	10.000	10.343	138014.74	0.1098	P	1.4	3.4
5	☐	100.000	101.699	1407179.35	1.0793	P	0.9	1.7
6	☐	200.000	199.127	2742944.54	2.1132	P	0.8	-0.4
7	☐	1.000						

y = 0.0106 * x + 8.6050E-005
R = 1.0000
DL = 0.009354 ppb
BEC = 0.008109 ppb

Weight: <None>
Min Conc: <None>

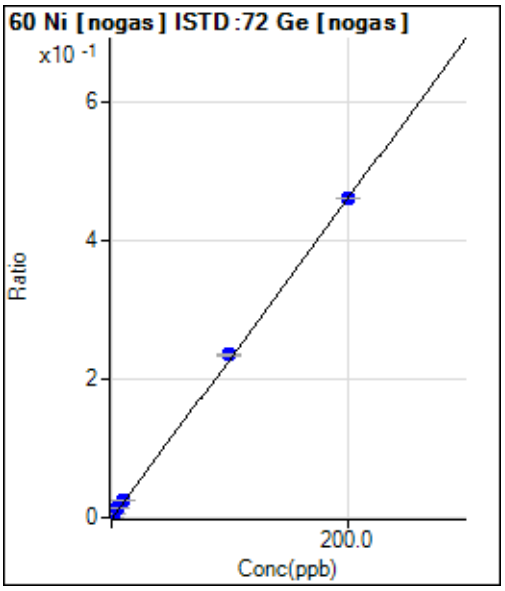


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	68.	
2	☐	2.000	2.065	12992.46	0.0278	P	3.7	3.3
3	☐	5.000	5.217	32973.01	0.0702	P	3.0	4.3
4	☐	10.000	9.956	64079.58	0.1340	P	2.0	-0.4
5	☐	100.000	101.454	658258.18	1.3655	P	1.0	1.5
6	☐	200.000	199.269	1293478.81	2.6819	P	1.7	-0.4
7	☐	1.000						

y = 0.0135 * x + 3.5819E-005
R = 1.0000
DL = 0.005485 ppb
BEC = 0.002661 ppb

Weight: <None>
Min Conc: <None>

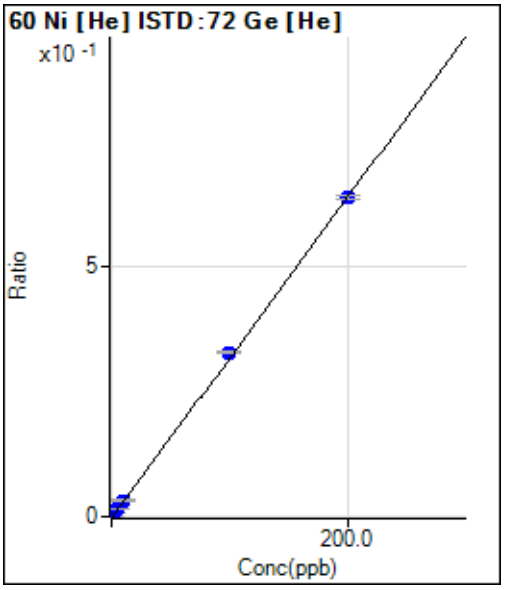
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.67	0.0003	P	29.	
2	☐	2.000	2.058	6258.09	0.0050	P	2.4	2.9
3	☐	5.000	5.318	15685.09	0.0126	P	0.9	6.4
4	☐	10.000	10.451	30745.16	0.0245	P	3.6	4.5
5	☐	100.000	101.532	307138.77	0.2355	P	0.5	1.5
6	☐	200.000	199.203	599566.32	0.4619	P	0.6	-0.4
7	☐	1.000						

y = 0.0023 * x + 2.5458E-004
R = 1.0000
DL = 0.09636 ppb
BEC = 0.1099 ppb

Weight: <None>
Min Conc: <None>

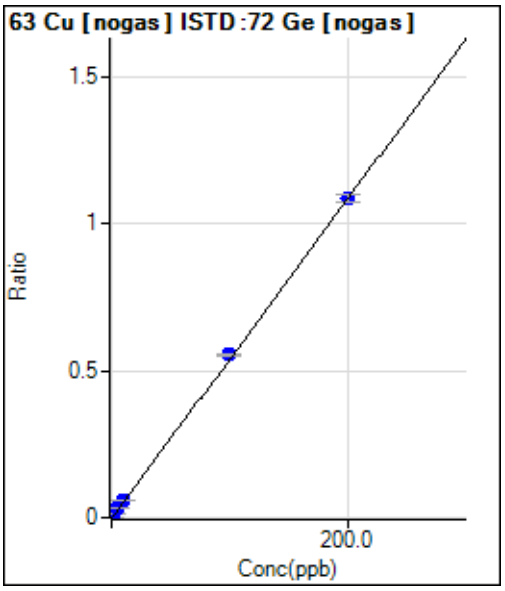


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	25.	
2	☐	2.000	2.206	3447.12	0.0074	P	0.7	10.3
3	☐	5.000	5.250	8038.96	0.0171	P	1.2	5.0
4	☐	10.000	10.043	15518.21	0.0325	P	3.0	0.4
5	☐	100.000	102.349	158044.05	0.3278	P	1.2	2.3
6	☐	200.000	198.815	306970.06	0.6365	P	0.9	-0.6
7	☐	1.000						

y = 0.0032 * x + 3.2371E-004
R = 0.9999
DL = 0.0763 ppb
BEC = 0.1012 ppb

Weight: <None>
Min Conc: <None>

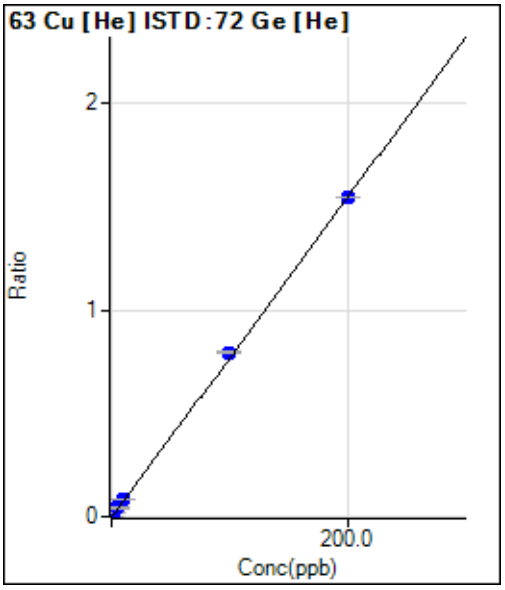
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2380.22	0.0019	P	6.2	
2	☐	2.000	1.957	15648.35	0.0126	P	2.5	-2.2
3	☐	5.000	5.088	36905.59	0.0296	P	0.7	1.8
4	☐	10.000	10.509	74243.17	0.0591	P	0.8	5.1
5	☐	100.000	101.300	721249.54	0.5531	P	0.5	1.3
6	☐	200.000	199.323	1409706.96	1.0864	P	1.9	-0.3
7	☐	1.000						

y = 0.0054 * x + 0.0019
R = 1.0000
DL = 0.06534 ppb
BEC = 0.3521 ppb

Weight: <None>
Min Conc: <None>

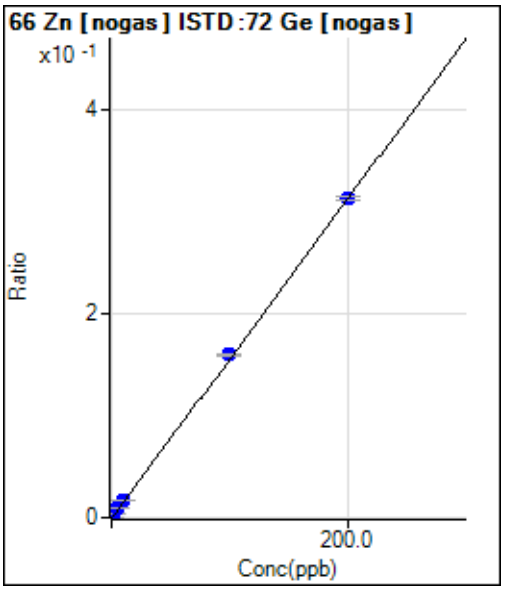


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1316.76	0.0028	P	1.7	
2	☐	2.000	2.008	8595.95	0.0184	P	3.0	0.4
3	☐	5.000	5.127	20000.25	0.0426	P	4.1	2.5
4	☐	10.000	10.250	39368.65	0.0823	P	1.0	2.5
5	☐	100.000	102.120	383213.65	0.7949	P	0.4	2.1
6	☐	200.000	198.924	745484.52	1.5457	P	0.1	-0.5
7	☐	1.000						

y = 0.0078 * x + 0.0028
R = 0.9999
DL = 0.01887 ppb
BEC = 0.3658 ppb

Weight: <None>
Min Conc: <None>

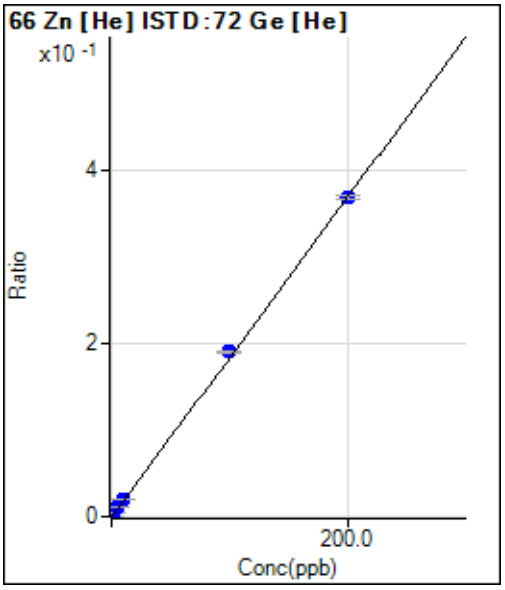
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	890.04	0.0007	P	6.6	
2	☐	2.000	2.192	5174.31	0.0042	P	4.1	9.6
3	☐	5.000	5.277	11214.40	0.0090	P	3.9	5.5
4	☐	10.000	10.388	21372.15	0.0170	P	0.9	3.9
5	☐	100.000	101.323	208167.25	0.1596	P	0.7	1.3
6	☐	200.000	199.310	406635.67	0.3133	P	1.4	-0.3
7	☐	1.000						

y = 0.0016 * x + 7.1645E-004
R = 1.0000
DL = 0.09071 ppb
BEC = 0.4568 ppb

Weight: <None>
Min Conc: <None>

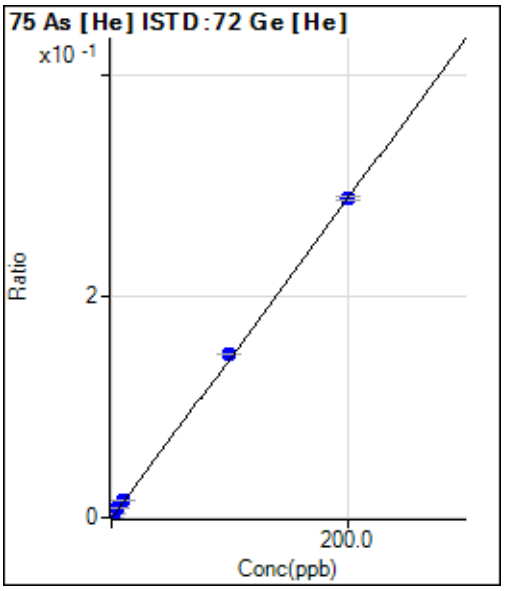


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	400.01	0.0009	P	1.7	
2	☐	2.000	2.055	2180.20	0.0047	P	8.4	2.8
3	☐	5.000	5.130	4867.54	0.0104	P	1.0	2.6
4	☐	10.000	10.036	9303.03	0.0195	P	5.4	0.4
5	☐	100.000	102.352	91853.66	0.1905	P	1.7	2.4
6	☐	200.000	198.818	178126.66	0.3693	P	1.1	-0.6
7	☐	1.000						

y = 0.0019 * x + 8.6172E-004
R = 0.9999
DL = 0.02358 ppb
BEC = 0.465 ppb

Weight: <None>
Min Conc: <None>

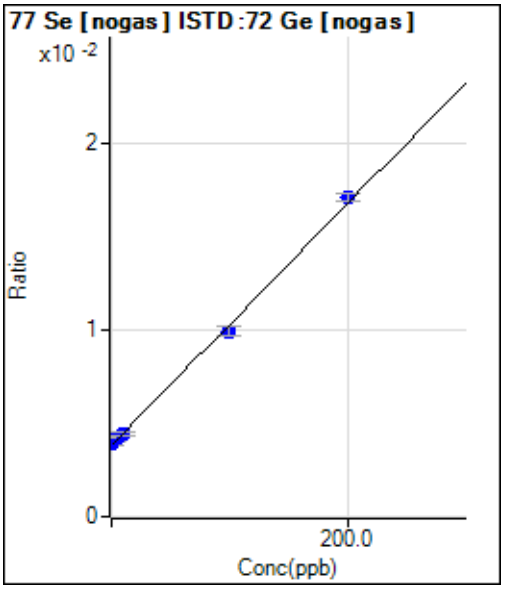
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	282.23	0.0006	P	15.	
2	☐	2.000	2.109	1706.77	0.0037	P	2.9	5.5
3	☐	5.000	5.122	3759.38	0.0080	P	2.0	2.4
4	☐	10.000	10.137	7294.05	0.0153	P	1.4	1.4
5	☐	100.000	101.772	71176.67	0.1476	P	1.0	1.8
6	☐	200.000	199.103	139031.39	0.2883	P	0.6	-0.4
7	☐	1.000						

y = 0.0014 * x + 6.0867E-004
R = 0.9999
DL = 0.2008 ppb
BEC = 0.4213 ppb

Weight: <None>
Min Conc: <None>

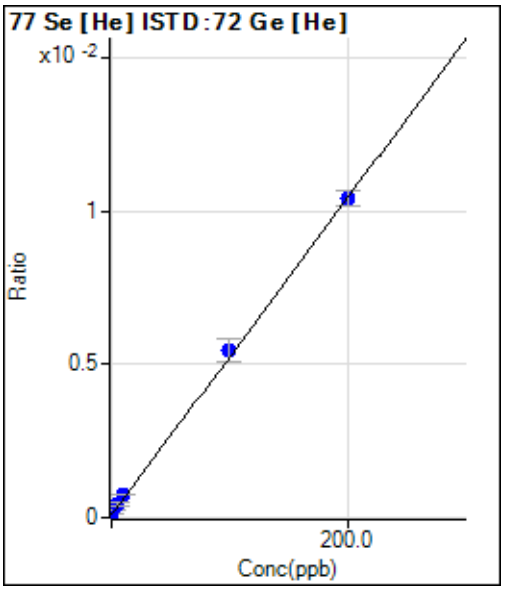


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4870.90	0.0039	P	4.5	
2	☐	2.000	2.735	5107.64	0.0041	P	1.8	36.7
3	☐	5.000	4.941	5287.70	0.0042	P	3.2	-1.2
4	☐	10.000	7.427	5531.12	0.0044	P	4.9	-25.7
5	☐	100.000	92.824	12915.78	0.0099	P	5.2	-7.2
6	☐	200.000	203.711	22156.86	0.0171	P	2.6	1.9
7	☐	1.000						

y = 6.4567E-005 * x + 0.0039
R = 0.9990
DL = 8.277 ppb
BEC = 60.74 ppb

Weight: <None>
Min Conc: <None>

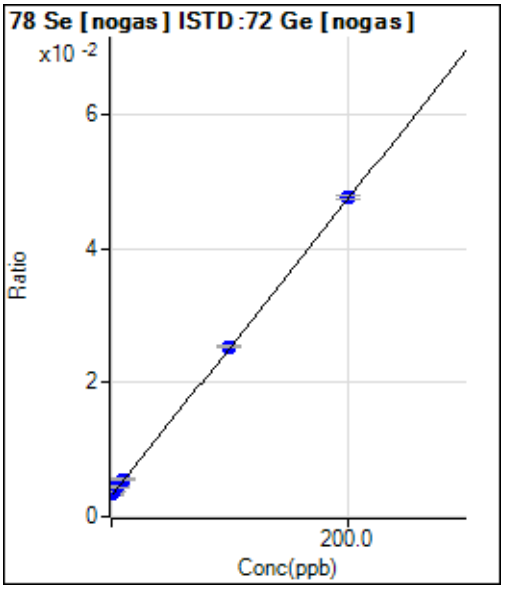
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	23.	
2	☐	2.000	3.427	146.67	0.0003	P	40.	71.3
3	☐	5.000	5.868	206.67	0.0004	P	17.	17.4
4	☐	10.000	11.767	356.68	0.0007	P	2.7	17.7
5	☐	100.000	102.604	2630.27	0.0055	P	13.	2.6
6	☐	200.000	198.574	5027.65	0.0104	P	4.9	-0.7
7	☐	1.000						

y = 5.1808E-005 * x + 1.3628E-004
R = 0.9999
DL = 1.844 ppb
BEC = 2.63 ppb

Weight: <None>
Min Conc: <None>

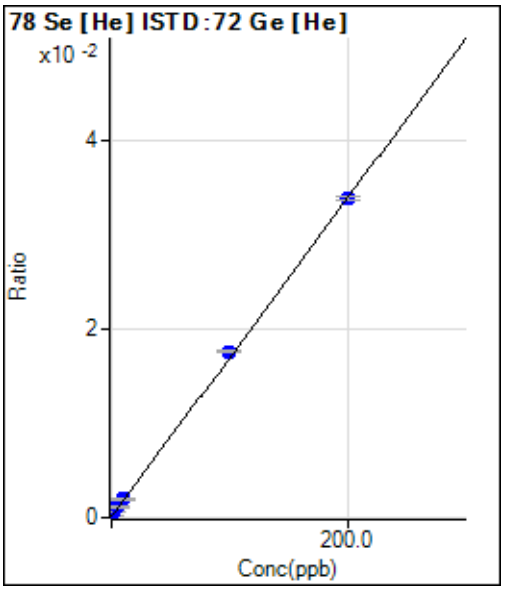


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4190.67	0.0034	P	4.6	
2	☐	2.000	1.866	4717.50	0.0038	P	4.5	-6.7
3	☐	5.000	4.899	5557.79	0.0045	P	6.5	-2.0
4	☐	10.000	9.971	7011.77	0.0056	P	5.9	-0.3
5	☐	100.000	99.530	33150.71	0.0254	P	0.5	-0.5
6	☐	200.000	200.241	61952.60	0.0477	P	1.4	0.1
7	☐	1.000						

y = 2.2154E-004 * x + 0.0034
R = 1.0000
DL = 2.085 ppb
BEC = 15.23 ppb

Weight: <None>
Min Conc: <None>

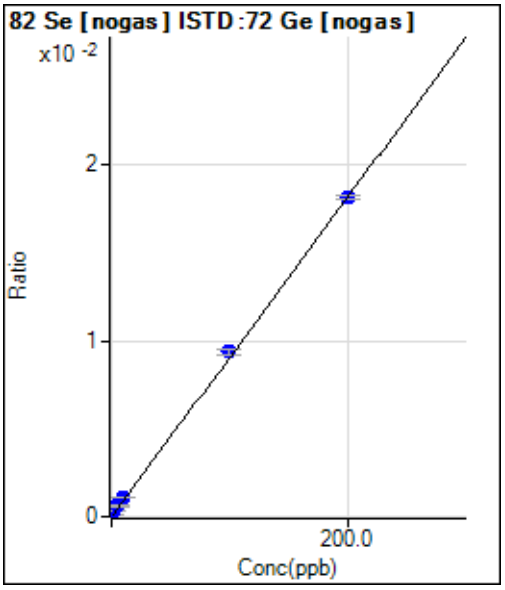
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0003	P	3.8	
2	☐	2.000	2.099	296.67	0.0006	P	6.6	5.0
3	☐	5.000	5.067	534.01	0.0011	P	3.2	1.3
4	☐	10.000	10.029	945.36	0.0020	P	4.0	0.3
5	☐	100.000	102.622	8505.12	0.0176	P	0.9	2.6
6	☐	200.000	198.685	16346.98	0.0339	P	0.8	-0.7
7	☐	1.000						

y = 1.6918E-004 * x + 2.8007E-004
R = 0.9999
DL = 0.1894 ppb
BEC = 1.655 ppb

Weight: <None>
Min Conc: <None>

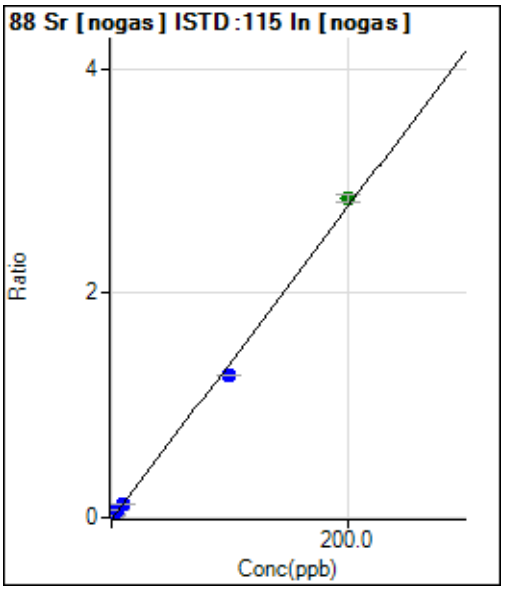


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0001	P	33.	
2	☐	2.000	2.610	400.01	0.0003	P	15.	30.5
3	☐	5.000	5.727	753.37	0.0006	P	6.2	14.5
4	☐	10.000	11.127	1376.76	0.0011	P	4.2	11.3
5	☐	100.000	102.077	12231.93	0.0094	P	3.9	2.1
6	☐	200.000	198.881	23609.05	0.0182	P	1.5	-0.6
7	☐	1.000						

y = 9.1047E-005 * x + 8.3030E-005
R = 0.9999
DL = 0.9068 ppb
BEC = 0.9119 ppb

Weight: <None>
Min Conc: <None>

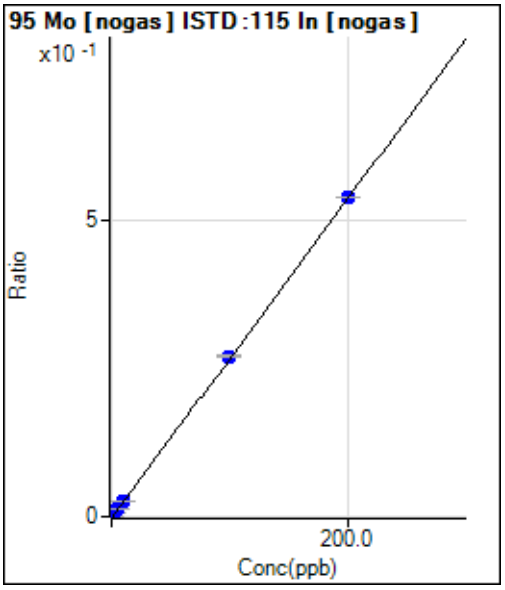
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	410.01	0.0003	P	5.1	
2	☐	2.000	1.840	34544.13	0.0259	P	1.8	-8.0
3	☐	5.000	4.591	86237.86	0.0642	P	1.6	-8.2
4	☐	10.000	9.002	171018.55	0.1257	P	0.6	-10.0
5	☐	100.000	90.975	1762014.92	1.2674	P	0.7	-9.0
6	☐	200.000	204.574	3975639.73	2.8495	A	2.3	2.3
7	☐	1.000						

y = 0.0139 * x + 3.0838E-004
R = 0.9986
DL = 0.003383 ppb
BEC = 0.02214 ppb

Weight: <None>
Min Conc: <None>

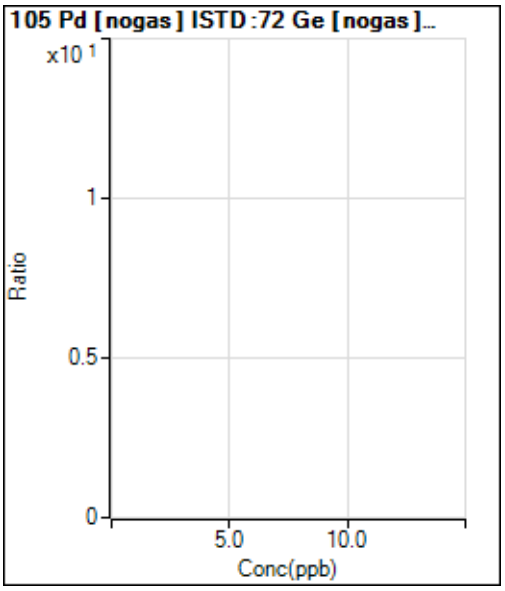


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.68	0.0002	P	13.	
2	☐	2.000	2.030	7515.39	0.0056	P	1.4	1.5
3	☐	5.000	4.899	17927.88	0.0134	P	3.5	-2.0
4	☐	10.000	9.912	36509.02	0.0268	P	0.8	-0.9
5	☐	100.000	100.377	375463.04	0.2700	P	1.5	0.4
6	☐	200.000	199.818	750005.72	0.5374	P	0.5	-0.1
7	☐	1.000						

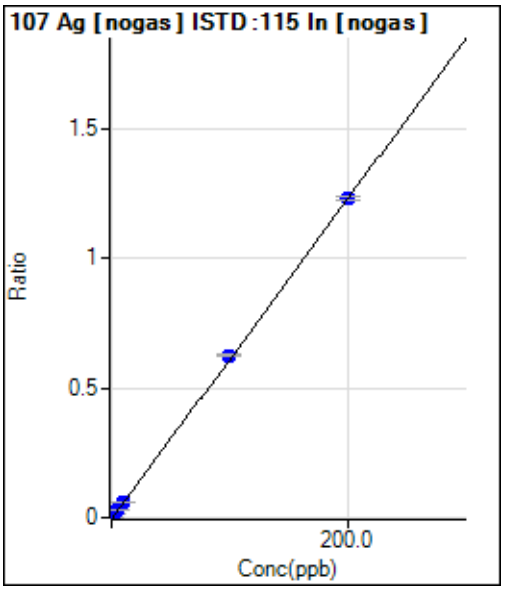
y = 0.0027 * x + 1.8543E-004
R = 1.0000
DL = 0.02871 ppb
BEC = 0.06897 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	13.	
2	☐	2.000	2.089	17330.63	0.0130	P	3.7	4.4
3	☐	5.000	5.105	42505.72	0.0317	P	3.1	2.1
4	☐	10.000	10.027	84504.47	0.0621	P	0.8	0.3
5	☐	100.000	101.372	871928.94	0.6270	P	1.5	1.4
6	☐	200.000	199.309	1720687.99	1.2327	P	1.0	-0.3
7	☐	1.000						

y = 0.0062 * x + 9.5324E-005

R = 1.0000

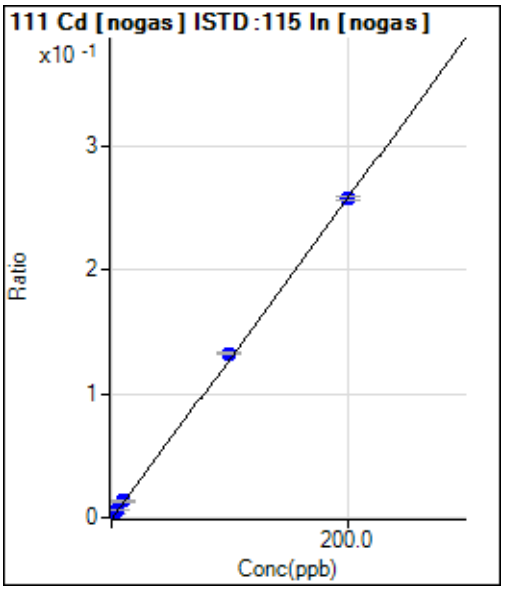
DL = 0.006033 ppb

BEC = 0.01541 ppb

Weight: <None>

Min Conc: <None>

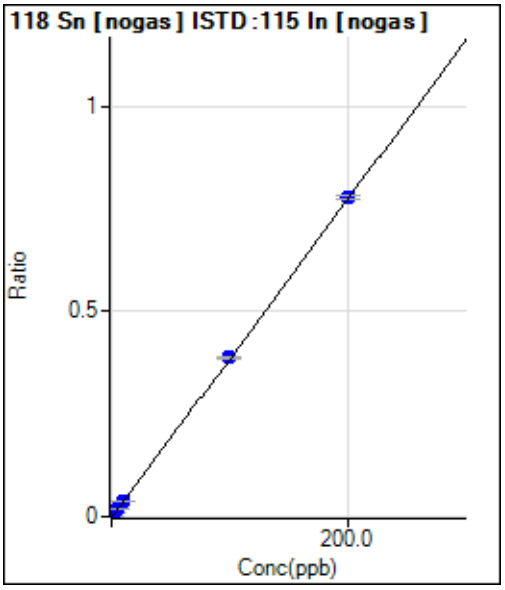
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.978	3417.14	0.0026	P	7.2	-1.1
3	☐	5.000	5.024	8742.76	0.0065	P	3.1	0.5
4	☐	10.000	10.265	18108.21	0.0133	P	2.2	2.7
5	☐	100.000	102.192	184266.41	0.1325	P	1.6	2.2
6	☐	200.000	198.890	359975.67	0.2579	P	1.2	-0.6
7	☐	1.000						

y = 0.0013 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

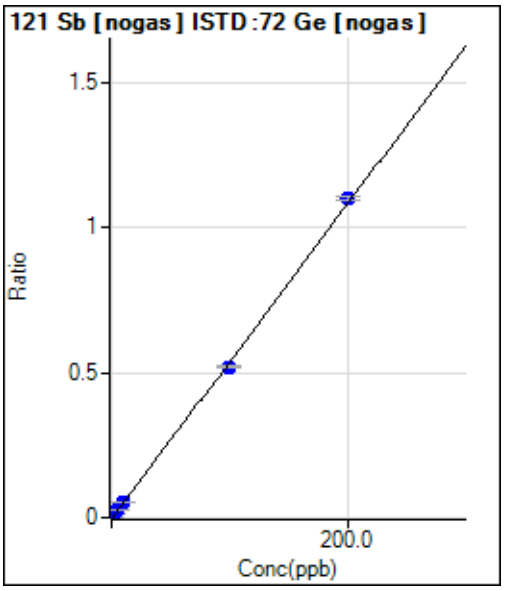


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1160.07	0.0009	P	8.9	
2	☐	2.000	1.979	11404.69	0.0086	P	1.8	-1.0
3	☐	5.000	4.903	26735.05	0.0199	P	0.9	-1.9
4	☐	10.000	9.752	52739.59	0.0388	P	2.8	-2.5
5	☐	100.000	99.532	538983.76	0.3875	P	1.9	-0.5
6	☐	200.000	200.249	1087308.76	0.7788	P	1.7	0.1
7	☐	1.000						

y = 0.0039 * x + 8.7188E-004
R = 1.0000
DL = 0.06007 ppb
BEC = 0.2244 ppb

Weight: <None>
Min Conc: <None>

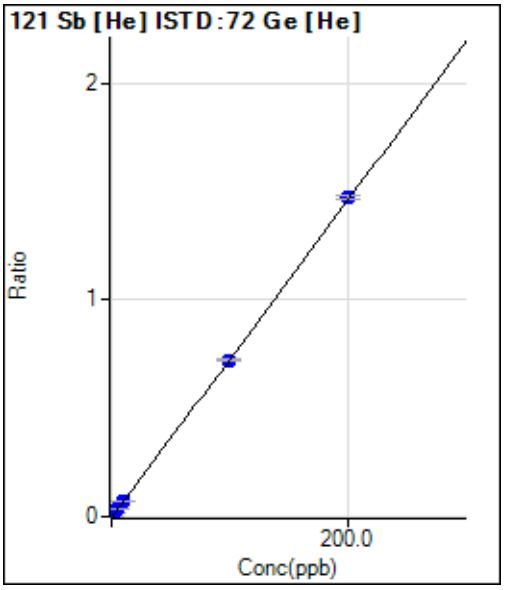
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	943.39	0.0008	P	12.	
2	☐	2.000	1.815	13239.62	0.0106	P	1.8	-9.3
3	☐	5.000	4.596	32096.16	0.0257	P	1.6	-8.1
4	☐	10.000	9.488	65756.34	0.0523	P	1.7	-5.1
5	☐	100.000	95.366	677206.52	0.5192	P	1.2	-4.6
6	☐	200.000	202.354	1429430.97	1.1008	P	1.0	1.2
7	☐	1.000						

y = 0.0054 * x + 7.5892E-004
R = 0.9996
DL = 0.05359 ppb
BEC = 0.1396 ppb

Weight: <None>
Min Conc: <None>

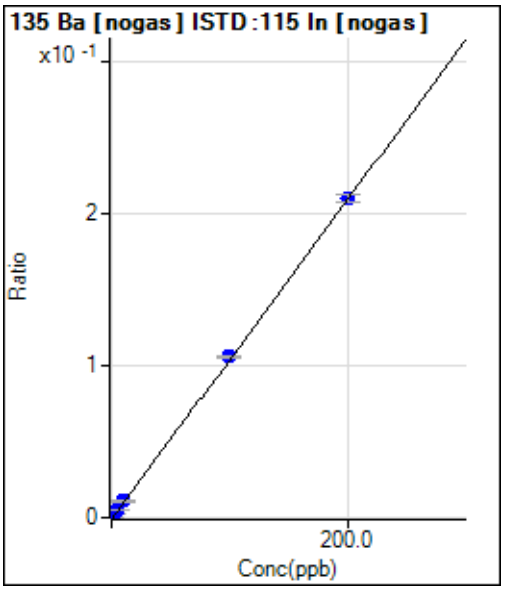


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	523.35	0.0011	P	22.	
2	☐	2.000	1.888	6991.81	0.0150	P	3.9	-5.6
3	☐	5.000	4.734	16826.74	0.0358	P	2.0	-5.3
4	☐	10.000	9.293	33118.37	0.0693	P	2.9	-7.1
5	☐	100.000	98.261	347852.03	0.7216	P	1.0	-1.7
6	☐	200.000	200.913	711022.05	1.4742	P	1.3	0.5
7	☐	1.000						

y = 0.0073 * x + 0.0011
R = 0.9999
DL = 0.1014 ppb
BEC = 0.154 ppb

Weight: <None>
Min Conc: <None>

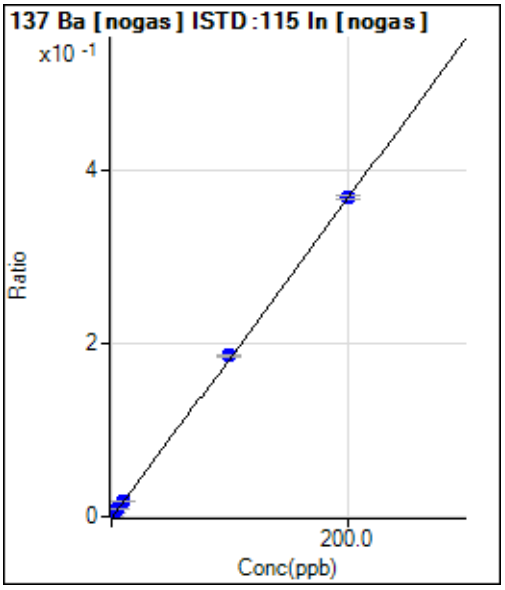
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	79.	
2	☐	2.000	1.903	2696.97	0.0020	P	4.1	-4.9
3	☐	5.000	4.896	6948.47	0.0052	P	3.9	-2.1
4	☐	10.000	10.364	14881.32	0.0109	P	4.6	3.6
5	☐	100.000	100.617	147381.56	0.1060	P	1.1	0.6
6	☐	200.000	199.677	293650.93	0.2103	P	2.1	-0.2
7	☐	1.000						

y = 0.0011 * x + 2.0141E-005
R = 1.0000
DL = 0.04535 ppb
BEC = 0.01912 ppb

Weight: <None>
Min Conc: <None>

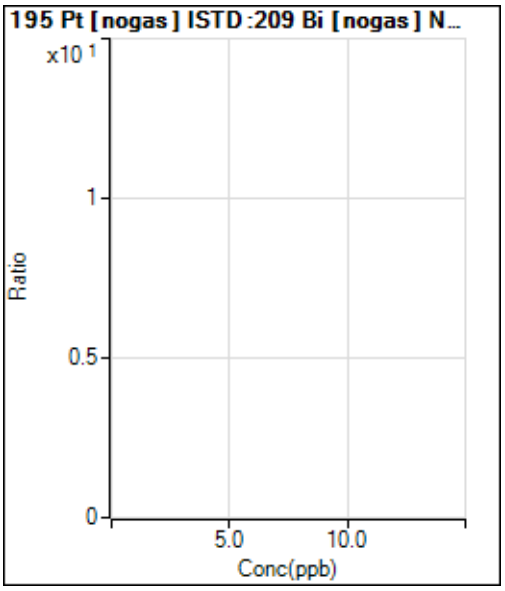


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	60.00	0.0000	P	66.	
2	☐	2.000	2.043	5084.34	0.0038	P	5.1	2.1
3	☐	5.000	4.930	12275.49	0.0091	P	3.5	-1.4
4	☐	10.000	9.981	25132.39	0.0185	P	1.7	-0.2
5	☐	100.000	100.743	258693.45	0.1860	P	1.4	0.7
6	☐	200.000	199.631	514524.84	0.3686	P	1.5	-0.2
7	☐	1.000						

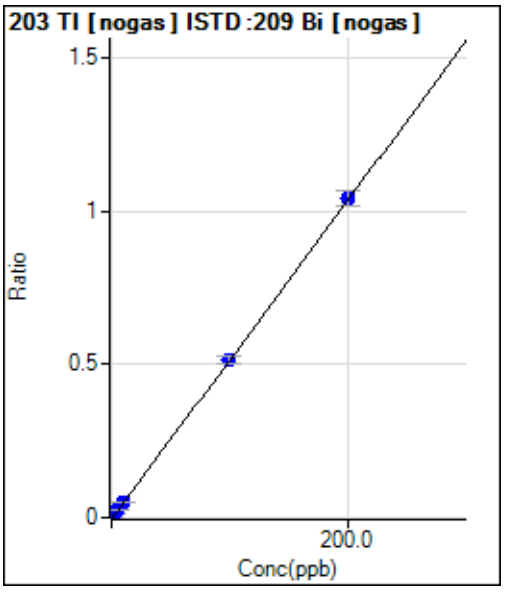
y = 0.0018 * x + 4.4988E-005
R = 1.0000
DL = 0.04865 ppb
BEC = 0.02437 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

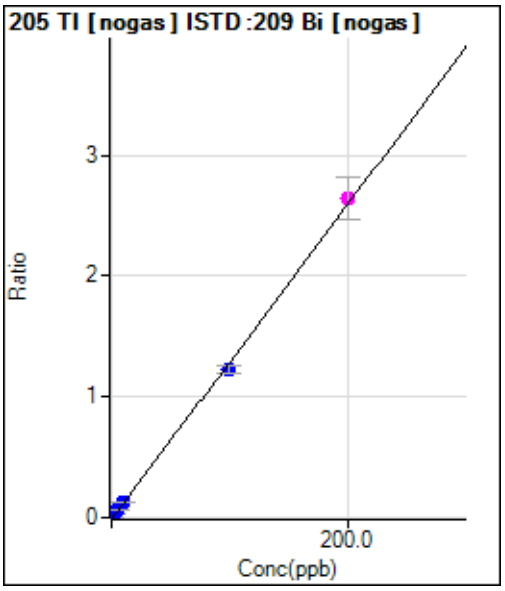


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	61.	
2	☐	2.000	2.020	11932.13	0.0105	P	4.4	1.0
3	☐	5.000	4.864	29121.30	0.0253	P	2.8	-2.7
4	☐	10.000	9.847	59181.47	0.0512	P	5.1	-1.5
5	☐	100.000	99.419	621523.73	0.5167	P	4.6	-0.6
6	☐	200.000	200.301	1259123.86	1.0410	P	4.3	0.2
7	☐	1.000						

y = 0.0052 * x + 2.0474E-005
R = 1.0000
DL = 0.00722 ppb
BEC = 0.003939 ppb

Weight: <None>
Min Conc: <None>

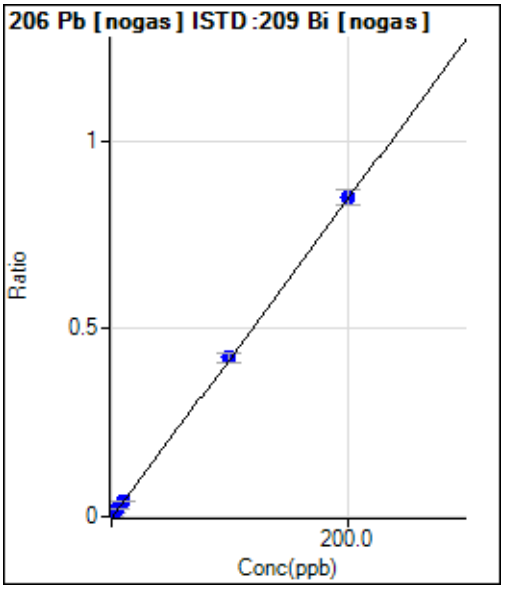
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96.67	0.0001	P	59.	
2	☐	2.000	1.898	28139.33	0.0248	P	5.0	-5.1
3	☐	5.000	4.682	70196.72	0.0611	P	7.8	-6.4
4	☐	10.000	9.408	141797.77	0.1227	P	5.2	-5.9
5	☐	100.000	94.419	1479888.10	1.2304	P	5.4	-5.6
6	☐	200.000	202.829	3194326.73	2.6430	M	13.	1.4
7	☐	1.000						

y = 0.0130 * x + 8.6818E-005
R = 0.9995
DL = 0.01179 ppb
BEC = 0.006663 ppb

Weight: <None>
Min Conc: <None>

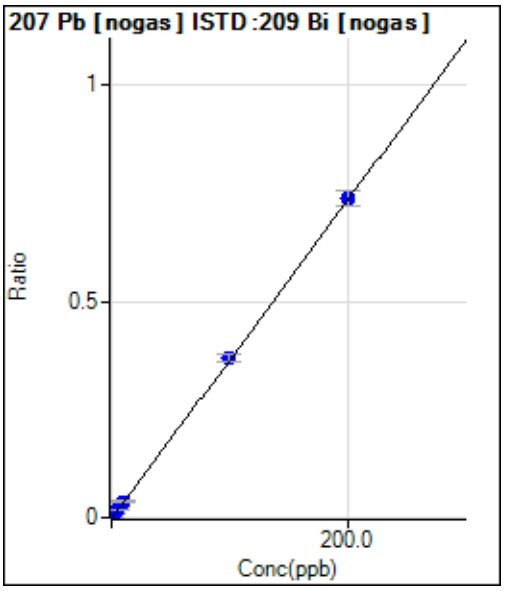


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	17.	
2	☐	2.000	2.059	10173.90	0.0090	P	5.3	2.9
3	☐	5.000	4.990	24629.21	0.0214	P	3.8	-0.2
4	☐	10.000	9.892	48794.53	0.0422	P	6.0	-1.1
5	☐	100.000	99.728	509367.58	0.4235	P	5.8	-0.3
6	☐	200.000	200.141	1027709.36	0.8497	P	4.9	0.1
7	☐	1.000						

y = 0.0042 * x + 2.3320E-004
R = 1.0000
DL = 0.0287 ppb
BEC = 0.05495 ppb

Weight: <None>
Min Conc: <None>

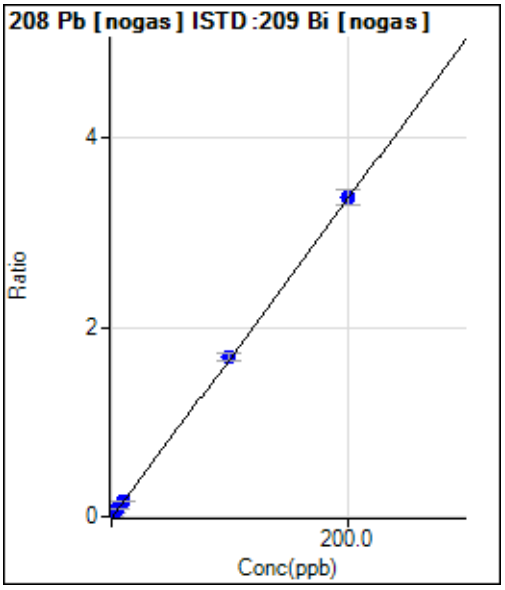
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	12.	
2	☐	2.000	1.996	8579.52	0.0076	P	6.4	-0.2
3	☐	5.000	4.956	21263.49	0.0185	P	4.1	-0.9
4	☐	10.000	9.949	42646.88	0.0369	P	6.0	-0.5
5	☐	100.000	99.762	442855.89	0.3682	P	5.3	-0.2
6	☐	200.000	200.123	893027.69	0.7384	P	4.3	0.1
7	☐	1.000						

y = 0.0037 * x + 2.0470E-004
R = 1.0000
DL = 0.02092 ppb
BEC = 0.0555 ppb

Weight: <None>
Min Conc: <None>

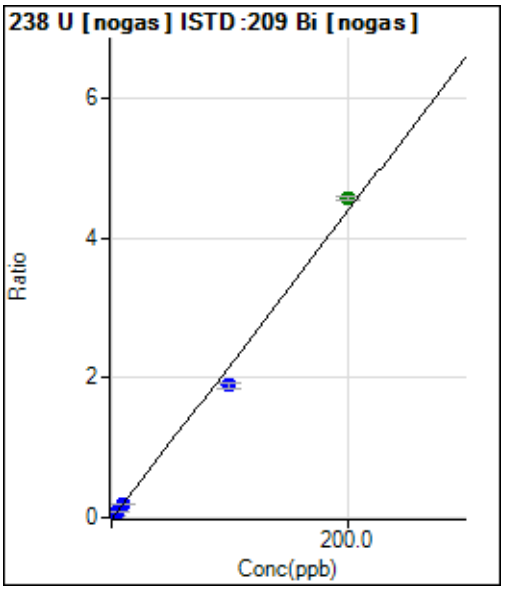


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1010.04	0.0009	P	2.5	
2	☐	2.000	2.020	39686.57	0.0350	P	5.7	1.0
3	☐	5.000	4.968	97473.88	0.0848	P	5.8	-0.6
4	☐	10.000	9.895	194140.91	0.1680	P	5.4	-1.0
5	☐	100.000	100.000	2031821.92	1.6892	P	5.3	0.0
6	☐	200.000	200.006	4085189.52	3.3776	P	4.5	0.0
7	☐	1.000						

y = 0.0169 * x + 9.0060E-004
R = 1.0000
DL = 0.003932 ppb
BEC = 0.05334 ppb

Weight: <None>
Min Conc: <None>

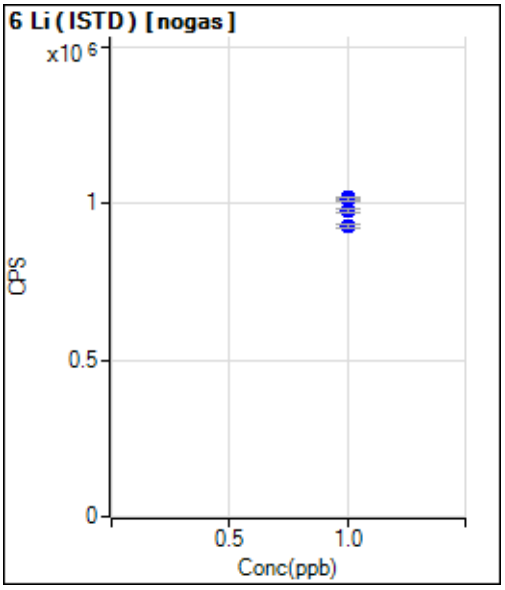
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	42.	
2	☐	2.000	1.685	42216.86	0.0372	P	6.0	-15.7
3	☐	5.000	4.191	106377.95	0.0925	P	6.3	-16.2
4	☐	10.000	8.469	216143.53	0.1870	P	4.0	-15.3
5	☐	100.000	85.620	2273215.02	1.8899	P	5.2	-14.4
6	☐	200.000	207.290	5533669.08	4.5755	A	0.8	3.6
7	☐	1.000						

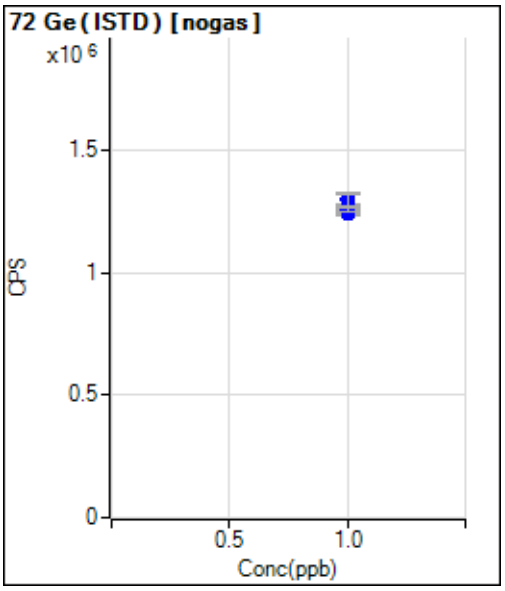
y = 0.0221 * x + 3.2725E-005
R = 0.9965
DL = 0.001895 ppb
BEC = 0.001483 ppb

Weight: <None>
Min Conc: <None>

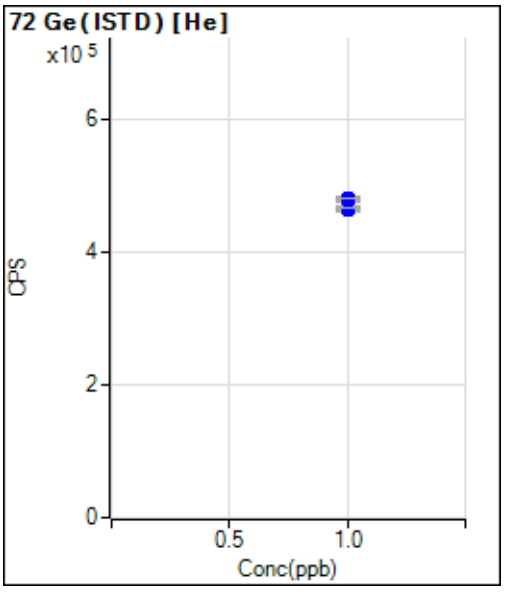


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1019192.69		P	0.5	
2	☐	1.000		1016035.97		P	0.2	
3	☐	1.000		1016954.73		P	0.9	
4	☐	1.000		1015407.04		P	1.3	
5	☐	1.000		976552.32		P	1.3	
6	☐	1.000		926974.35		P	1.9	
7	☐	1.000						

Calibration for 277_ICV.d

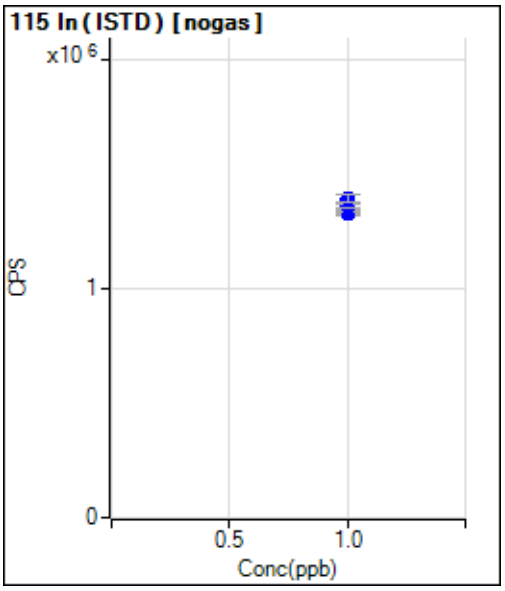


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1242233.31		P	0.9	
2	☐	1.000		1245996.44		P	1.2	
3	☐	1.000		1246871.81		P	1.2	
4	☐	1.000		1256449.30		P	1.2	
5	☐	1.000		1304023.52		P	3.2	
6	☐	1.000		1298265.14		P	3.8	
7	☐	1.000						

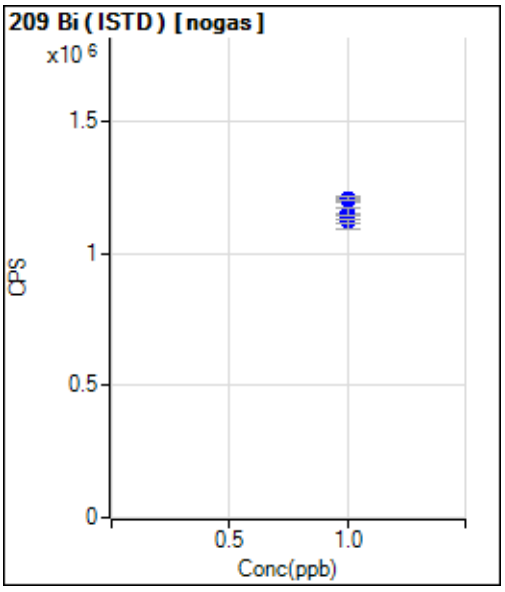


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		464161.96		P	1.0	
2	☐	1.000		466914.16		P	0.6	
3	☐	1.000		469461.87		P	0.5	
4	☐	1.000		478144.43		P	0.6	
5	☐	1.000		482116.50		P	1.2	
6	☐	1.000		482303.47		P	0.3	
7	☐	1.000						

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1329983.84		P	1.1	
2	☐	1.000		1332076.31		P	0.9	
3	☐	1.000		1342284.17		P	0.2	
4	☐	1.000		1360697.93		P	0.8	
5	☐	1.000		1390340.87		P	2.9	
6	☐	1.000		1395713.28		P	2.4	
7	☐	1.000						



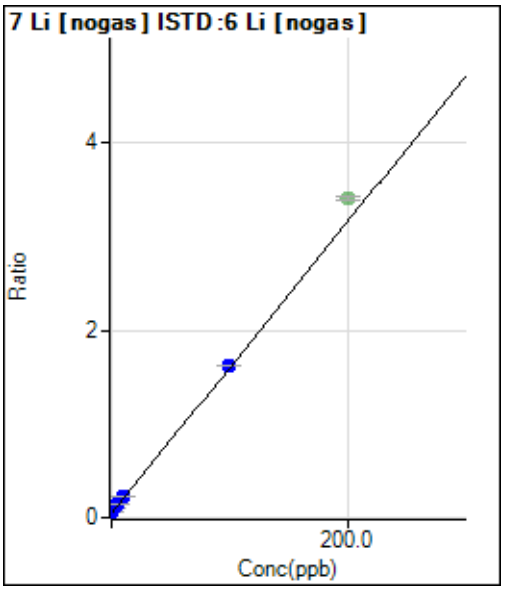
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1120971.65		P	4.6	
2	☐	1.000		1135220.37		P	3.2	
3	☐	1.000		1151572.04		P	4.3	
4	☐	1.000		1156950.63		P	2.7	
5	☐	1.000		1203047.66		P	0.9	
6	☐	1.000		1209451.39		P	1.2	
7	☐	1.000						

Calibration for 132_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 9:58:20 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	125CALB.d	CAL BLK	8/4/2023 2:43:10 PM
2	126CALS.d	2/10/200	8/4/2023 2:45:12 PM
3	127CALS.d	5/25/500	8/4/2023 2:47:14 PM
4	128CALS.d	10/50/1000	8/4/2023 2:49:16 PM
5	129CALS.d	100/500/10K	8/4/2023 2:51:18 PM
6	130CALS.d	200/1000/20K	8/4/2023 2:53:20 PM
7			

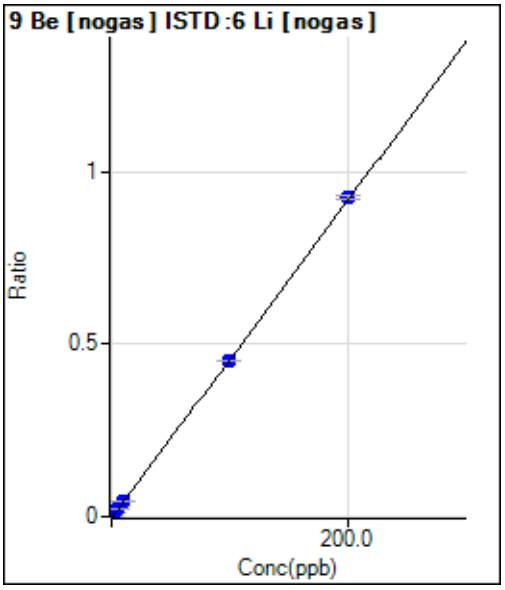
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	88770.39	0.0668	P	1.2	
2	☐	2.000	2.054	131184.02	0.0988	P	1.2	2.7
3	☐	5.000	4.973	190877.84	0.1442	P	1.3	-0.5
4	☐	10.000	9.727	290897.29	0.2183	P	0.3	-2.7
5	☐	100.000	100.028	2069318.56	1.6245	P	0.6	0.0
6	☑	200.000		4092981.29	3.4130	A	1.8	
7	☐	1.000						

y = 0.0156 * x + 0.0668
R = 1.0000
DL = 0.1553 ppb
BEC = 4.291 ppb

Weight: <None>
Min Conc: <None>

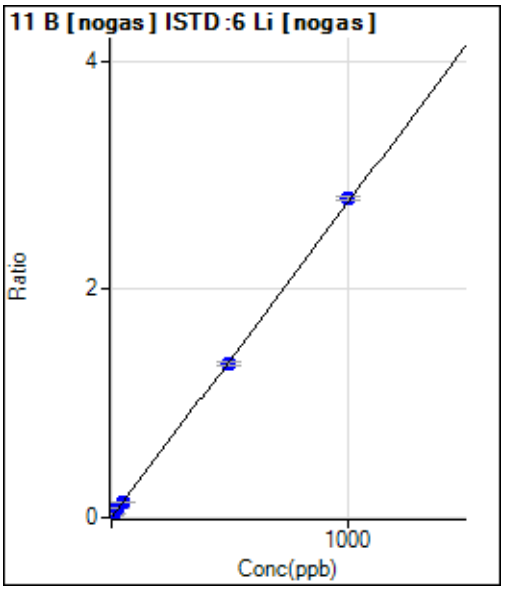


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21.67	0.0000	P	69.	
2	☐	2.000	1.949	11959.64	0.0090	P	3.0	-2.5
3	☐	5.000	4.727	28875.10	0.0218	P	2.4	-5.5
4	☐	10.000	9.298	57176.07	0.0429	P	0.7	-7.0
5	☐	100.000	98.030	576027.90	0.4522	P	1.0	-2.0
6	☐	200.000	201.027	1112225.22	0.9273	P	0.6	0.5
7	☐	1.000						

y = 0.0046 * x + 1.6245E-005
R = 0.9999
DL = 0.00739 ppb
BEC = 0.003522 ppb

Weight: <None>
Min Conc: <None>

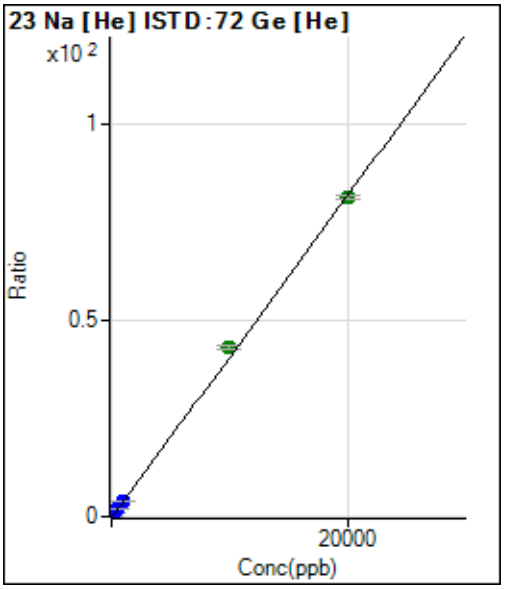
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23098.88	0.0174	P	5.6	
2	☐	10.000	8.793	55296.29	0.0416	P	0.2	-12.1
3	☐	25.000	21.847	102768.35	0.0777	P	1.5	-12.6
4	☐	50.000	44.574	187027.86	0.1403	P	0.9	-10.9
5	☐	500.000	482.629	1718155.50	1.3487	P	1.6	-3.5
6	☐	1000.000	1009.048	3359395.26	2.8008	P	0.7	0.9
7	☐	5.000						

y = 0.0028 * x + 0.0174
R = 0.9998
DL = 1.054 ppb
BEC = 6.305 ppb

Weight: <None>
Min Conc: <None>

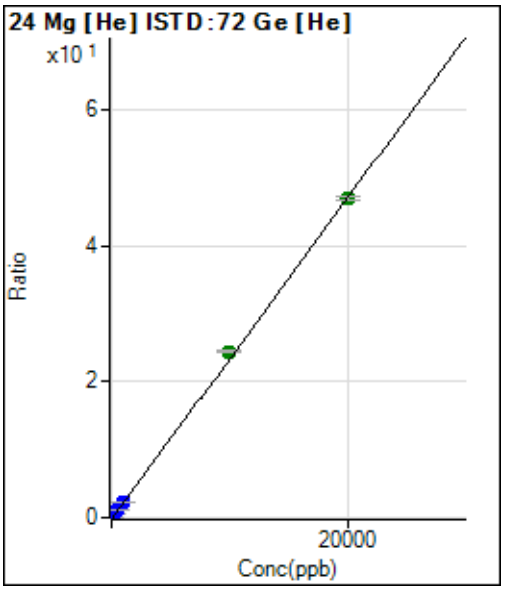


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	42030.78	0.0834	P	2.8	
2	☐	200.000	203.842	464611.58	0.9195	P	1.6	1.9
3	☐	500.000	480.749	1058980.95	2.0553	P	0.9	-3.9
4	☐	1000.000	960.389	2057439.45	4.0227	P	1.1	-4.0
5	☐	10000.00	10458.14	22378627.17	42.9795	A	1.5	4.6
6	☐	20000.00	19773.35	41855098.54	81.1877	A	1.5	-1.1
7	☐	100.000						

y = 0.0041 * x + 0.0834
R = 0.9996
DL = 1.708 ppb
BEC = 20.34 ppb

Weight: <None>
Min Conc: <None>

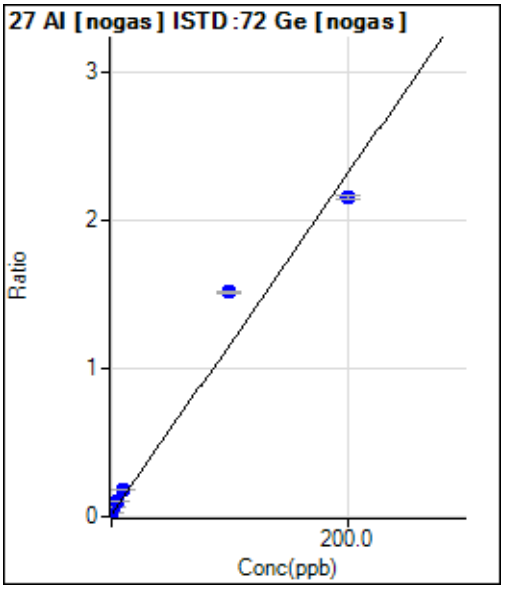
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1113.41	0.0022	P	9.0	
2	☐	200.000	201.798	242393.49	0.4798	P	1.5	0.9
3	☐	500.000	474.092	579182.15	1.1242	P	1.7	-5.2
4	☐	1000.000	947.720	1148241.49	2.2450	P	0.7	-5.2
5	☐	10000.00	10294.08	12685121.06	24.3633	A	1.2	2.9
6	☐	20000.00	19856.20	24226178.81	46.9922	A	1.5	-0.7
7	☐	100.000						

y = 0.0024 * x + 0.0022
R = 0.9998
DL = 0.2532 ppb
BEC = 0.9344 ppb

Weight: <None>
Min Conc: <None>

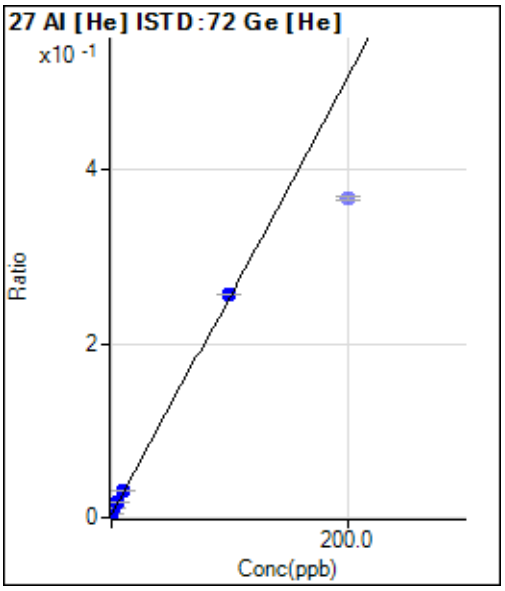


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35006.97	0.0257	P	3.9	
2	☐	2.000	3.399	88114.75	0.0648	P	2.1	69.9
3	☐	5.000	6.942	145788.63	0.1056	P	2.3	38.8
4	☐	10.000	13.783	256188.46	0.1842	P	1.6	37.8
5	☐	100.000	129.312	2148767.37	1.5126	P	1.3	29.3
6	☐	200.000	185.092	3035159.54	2.1540	P	0.8	-7.5
7	☐	1.000						

y = 0.0115 * x + 0.0257
R = 0.9845
DL = 0.2632 ppb
BEC = 2.239 ppb

Weight: <None>
Min Conc: <None>

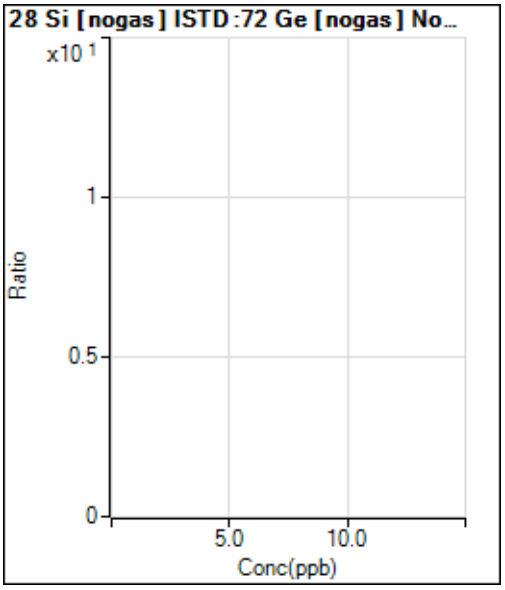
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2303.56	0.0046	P	6.4	
2	☐	2.000	2.601	5617.80	0.0111	P	3.7	30.1
3	☐	5.000	5.186	9082.88	0.0176	P	2.1	3.7
4	☐	10.000	10.336	15644.85	0.0306	P	0.4	3.4
5	☐	100.000	99.945	133350.62	0.2561	P	0.4	-0.1
6	☑	200.000		189315.82	0.3672	P	0.8	
7	☐	1.000						

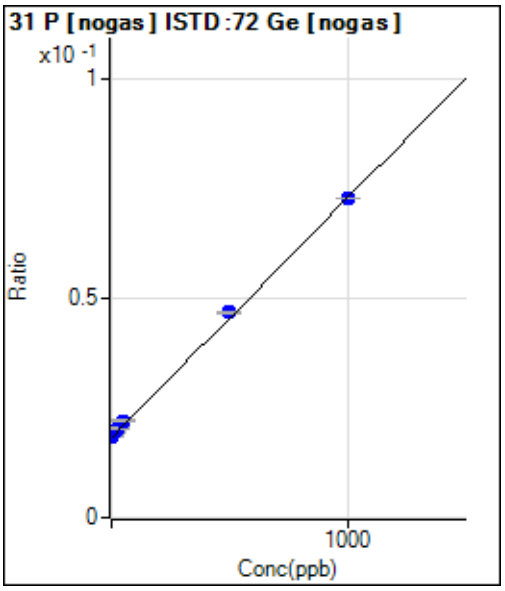
y = 0.0025 * x + 0.0046
R = 1.0000
DL = 0.3503 ppb
BEC = 1.817 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

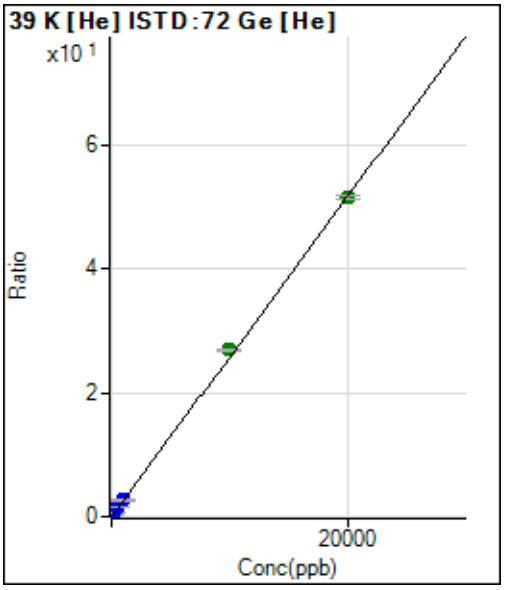
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25284.65	0.0186	P	2.2	
2	☐	10.000	16.634	26490.14	0.0195	P	1.2	66.3
3	☐	25.000	31.274	28015.87	0.0203	P	1.0	25.1
4	☐	50.000	61.589	30510.67	0.0219	P	2.3	23.2
5	☐	500.000	515.435	66413.89	0.0467	P	1.3	3.1
6	☐	1000.000	991.480	102500.96	0.0727	P	0.0	-0.9
7	☐	5.000						

y = 5.4617E-005 * x + 0.0186
R = 0.9998
DL = 22.42 ppb
BEC = 340.2 ppb

Weight: <None>
Min Conc: <None>

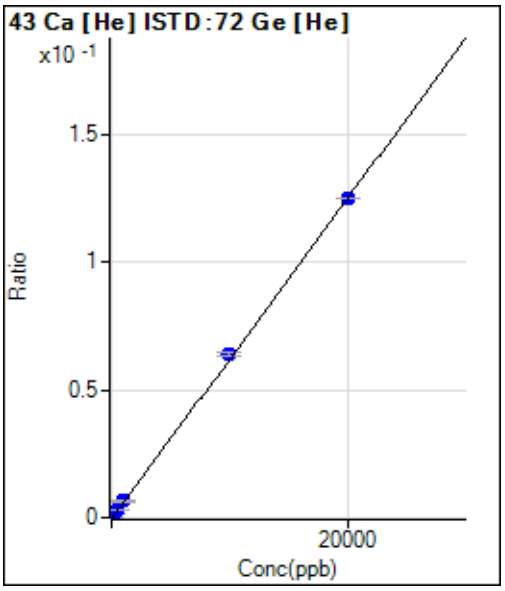


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120176.49	0.2386	P	2.1	
2	☐	200.000	194.944	375665.32	0.7436	P	1.6	-2.5
3	☐	500.000	464.544	742897.57	1.4419	P	0.8	-7.1
4	☐	1000.000	932.918	1357926.28	2.6550	P	0.9	-6.7
5	☐	10000.00	10329.12	14053346.04	26.9923	A	0.9	3.3
6	☐	20000.00	19839.72	26616130.44	51.6259	A	0.9	-0.8
7	☐	100.000						

y = 0.0026 * x + 0.2386
R = 0.9998
DL = 5.908 ppb
BEC = 92.13 ppb

Weight: <None>
Min Conc: <None>

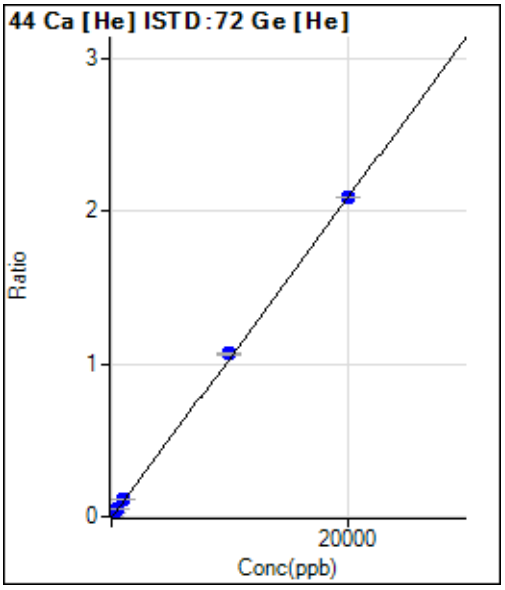
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0001	P	12.	
2	☐	200.000	206.133	696.69	0.0014	P	6.7	3.1
3	☐	500.000	510.370	1693.46	0.0033	P	3.4	2.1
4	☐	1000.000	1046.816	3403.79	0.0067	P	10.	4.7
5	☐	10000.00	10205.30	33370.22	0.0641	P	2.6	2.1
6	☐	20000.00	19894.68	64379.37	0.1249	P	0.4	-0.5
7	☐	100.000						

y = 6.2722E-006 * x + 8.5977E-005
R = 0.9999
DL = 5.101 ppb
BEC = 13.71 ppb

Weight: <None>
Min Conc: <None>

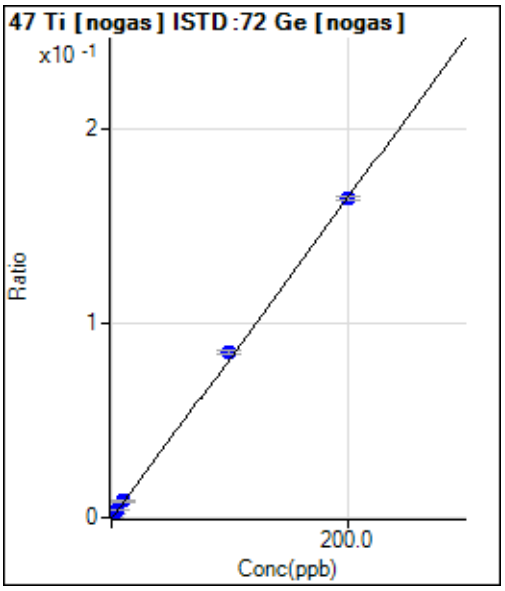


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0026	P	7.9	
2	☐	200.000	211.547	12512.03	0.0248	P	5.0	5.8
3	☐	500.000	508.262	28787.64	0.0559	P	1.5	1.7
4	☐	1000.000	1032.499	56682.28	0.1108	P	0.3	3.2
5	☐	10000.00	10135.98	554514.82	1.0650	P	0.4	1.4
6	☐	20000.00	19930.05	1078399.05	2.0916	P	0.2	-0.3
7	☐	100.000						

y = 1.0482E-004 * x + 0.0026
R = 1.0000
DL = 5.876 ppb
BEC = 24.75 ppb

Weight: <None>
Min Conc: <None>

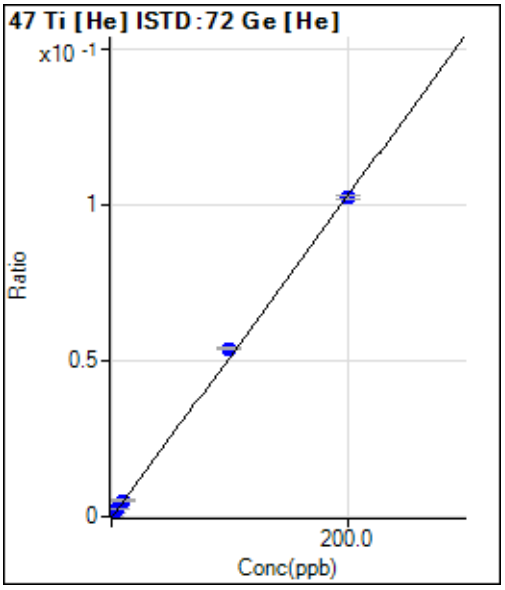
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	176.67	0.0001	P	18.	
2	☐	2.000	2.174	2626.94	0.0019	P	5.8	8.7
3	☐	5.000	5.009	5907.92	0.0043	P	3.4	0.2
4	☐	10.000	10.070	11784.80	0.0085	P	1.7	0.7
5	☐	100.000	102.695	121023.91	0.0852	P	2.6	2.7
6	☐	200.000	198.647	232073.69	0.1647	P	1.0	-0.7
7	☐	1.000						

y = 8.2845E-004 * x + 1.2990E-004
R = 0.9999
DL = 0.08734 ppb
BEC = 0.1568 ppb

Weight: <None>
Min Conc: <None>

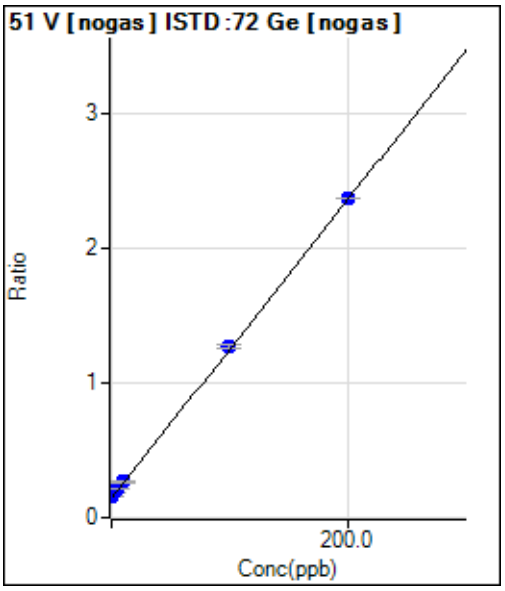


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	11.	
2	☐	2.000	2.096	603.35	0.0012	P	18.	4.8
3	☐	5.000	4.515	1260.08	0.0024	P	11.	-9.7
4	☐	10.000	9.618	2596.94	0.0051	P	9.8	-3.8
5	☐	100.000	104.136	28059.67	0.0539	P	1.9	4.1
6	☐	200.000	197.962	52772.27	0.1023	P	1.0	-1.0
7	☐	1.000						

y = 5.1645E-004 * x + 1.1258E-004
R = 0.9997
DL = 0.07192 ppb
BEC = 0.218 ppb

Weight: <None>
Min Conc: <None>

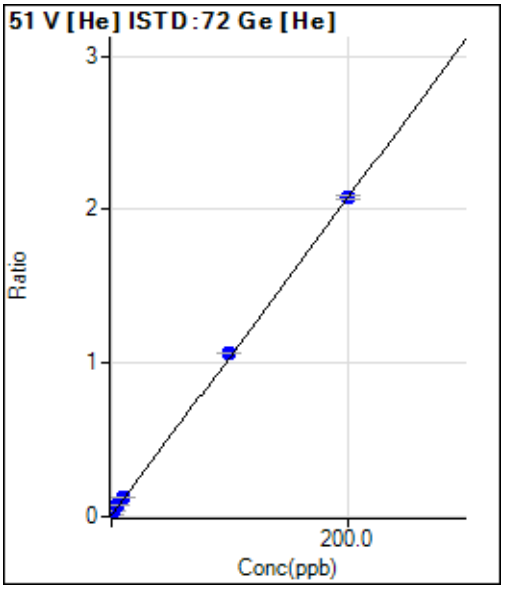
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	212615.13	0.1562	P	1.0	
2	☐	2.000	2.732	253467.02	0.1865	P	0.9	36.6
3	☐	5.000	5.390	298085.45	0.2159	P	1.0	7.8
4	☐	10.000	9.838	368460.25	0.2650	P	2.3	-1.6
5	☐	100.000	100.247	1796668.15	1.2650	P	2.0	0.2
6	☐	200.000	199.867	3335309.84	2.3668	P	0.3	-0.1
7	☐	1.000						

y = 0.0111 * x + 0.1562
R = 1.0000
DL = 0.4257 ppb
BEC = 14.13 ppb

Weight: <None>
Min Conc: <None>

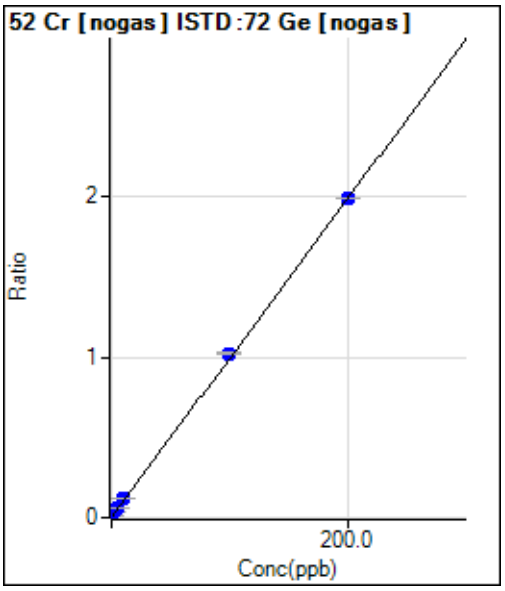


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9178.38	0.0182	P	3.0	
2	☐	2.000	2.155	20471.68	0.0405	P	2.0	7.7
3	☐	5.000	4.948	35772.16	0.0694	P	0.8	-1.0
4	☐	10.000	10.067	62600.83	0.1224	P	1.2	0.7
5	☐	100.000	101.281	555155.29	1.0663	P	0.3	1.3
6	☐	200.000	199.356	1072923.71	2.0811	P	1.1	-0.3
7	☐	1.000						

y = 0.0103 * x + 0.0182
R = 1.0000
DL = 0.1586 ppb
BEC = 1.761 ppb

Weight: <None>
Min Conc: <None>

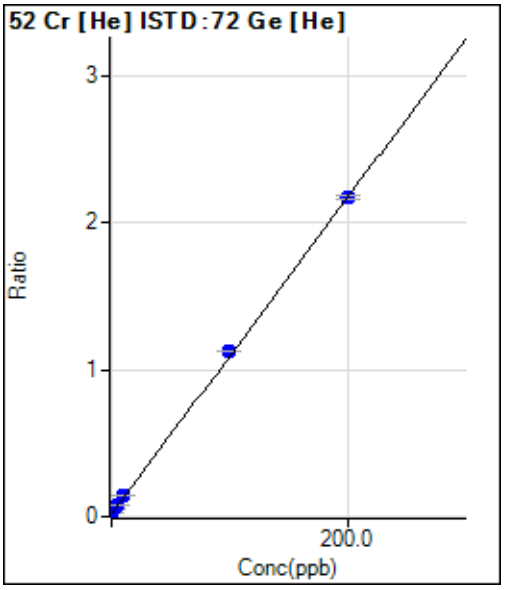
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17744.08	0.0130	P	4.0	
2	☐	2.000	2.214	47568.41	0.0350	P	1.7	10.7
3	☐	5.000	5.186	89034.53	0.0645	P	1.2	3.7
4	☐	10.000	10.611	164455.85	0.1183	P	1.4	6.1
5	☐	100.000	101.624	1450305.14	1.0209	P	1.5	1.6
6	☐	200.000	199.151	2801910.06	1.9882	P	0.4	-0.4
7	☐	1.000						

y = 0.0099 * x + 0.0130
R = 1.0000
DL = 0.1591 ppb
BEC = 1.315 ppb

Weight: <None>
Min Conc: <None>

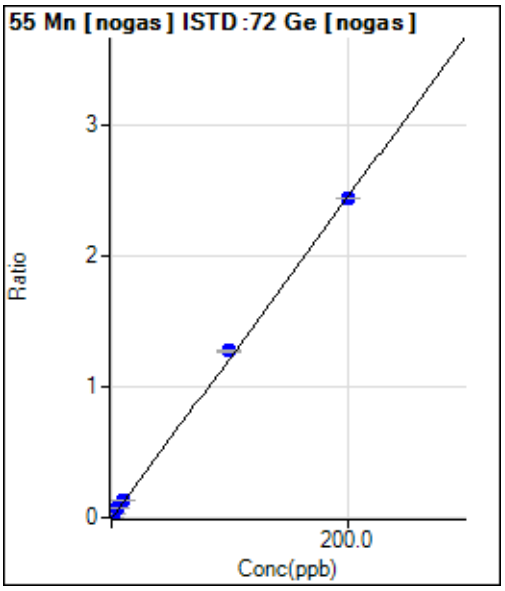


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14073.46	0.0280	P	6.6	
2	☐	2.000	2.167	25932.66	0.0513	P	2.2	8.4
3	☐	5.000	5.143	42981.46	0.0834	P	1.3	2.9
4	☐	10.000	10.761	73652.84	0.1440	P	1.4	7.6
5	☐	100.000	101.968	587063.91	1.1275	P	0.5	2.0
6	☐	200.000	198.973	1120598.03	2.1736	P	1.7	-0.5
7	☐	1.000						

y = 0.0108 * x + 0.0280
R = 0.9999
DL = 0.5113 ppb
BEC = 2.592 ppb

Weight: <None>
Min Conc: <None>

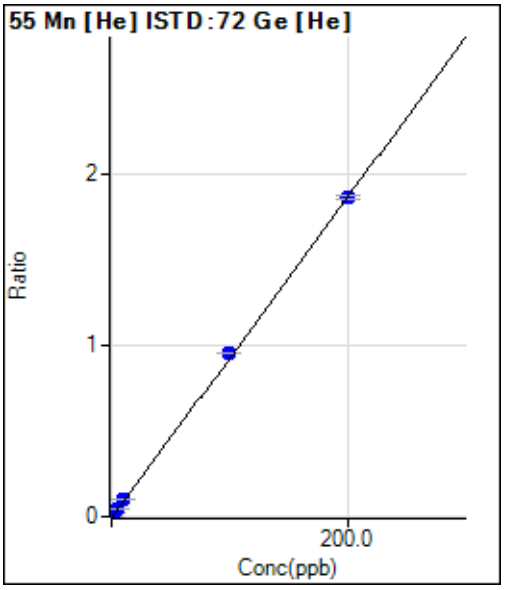
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5984.65	0.0044	P	5.4	
2	☐	2.000	2.273	43971.08	0.0323	P	1.7	13.6
3	☐	5.000	5.310	96249.23	0.0697	P	2.1	6.2
4	☐	10.000	10.587	187159.46	0.1346	P	0.5	5.9
5	☐	100.000	103.439	1813235.91	1.2764	P	1.5	3.4
6	☐	200.000	198.240	3441843.91	2.4421	P	0.4	-0.9
7	☐	1.000						

y = 0.0123 * x + 0.0044
R = 0.9998
DL = 0.05831 ppb
BEC = 0.3579 ppb

Weight: <None>
Min Conc: <None>

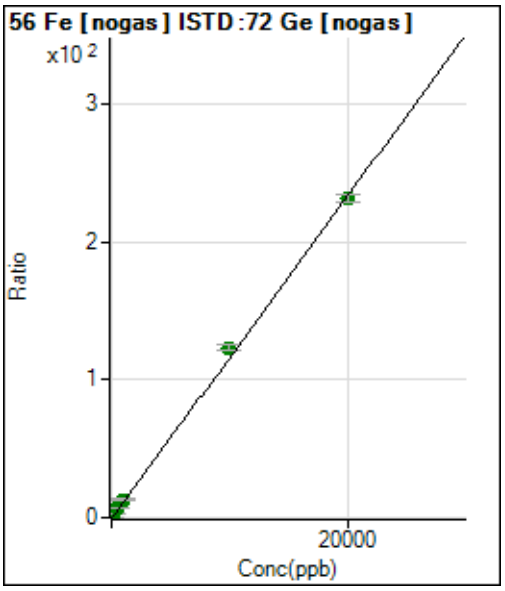


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	526.68	0.0010	P	13.	
2	☐	2.000	2.228	11047.53	0.0219	P	2.3	11.4
3	☐	5.000	5.168	25421.74	0.0493	P	4.3	3.4
4	☐	10.000	10.434	50407.83	0.0986	P	1.0	4.3
5	☐	100.000	102.044	497049.93	0.9546	P	0.5	2.0
6	☐	200.000	198.950	959035.48	1.8602	P	1.6	-0.5
7	☐	1.000						

y = 0.0093 * x + 0.0010
R = 0.9999
DL = 0.0435 ppb
BEC = 0.112 ppb

Weight: <None>
Min Conc: <None>

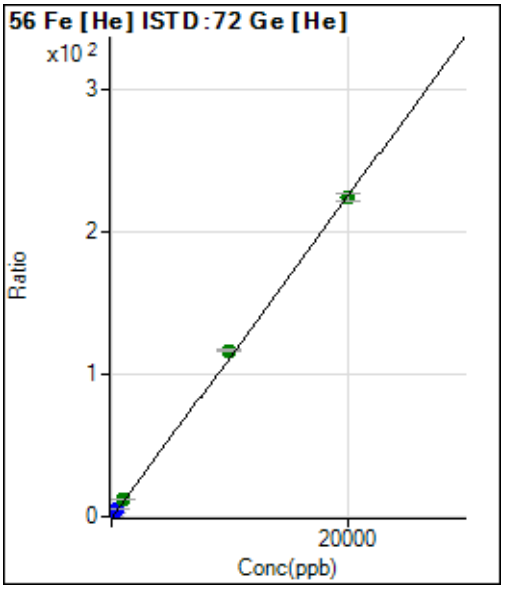
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	543264.50	0.3993	P	1.7	
2	☐	200.000	239.379	4356138.58	3.2045	A	1.3	19.7
3	☐	500.000	556.061	9549243.40	6.9155	A	0.8	11.2
4	☐	1000.000	1089.377	18303409.73	13.1651	A	1.8	8.9
5	☐	10000.00	10504.29	175371204.0	123.493	A	2.7	5.0
6	☐	20000.00	19741.58	326410355.1	231.739	A	2.8	-1.3
7	☐	100.000						

y = 0.0117 * x + 0.3993
R = 0.9996
DL = 1.718 ppb
BEC = 34.08 ppb

Weight: <None>
Min Conc: <None>

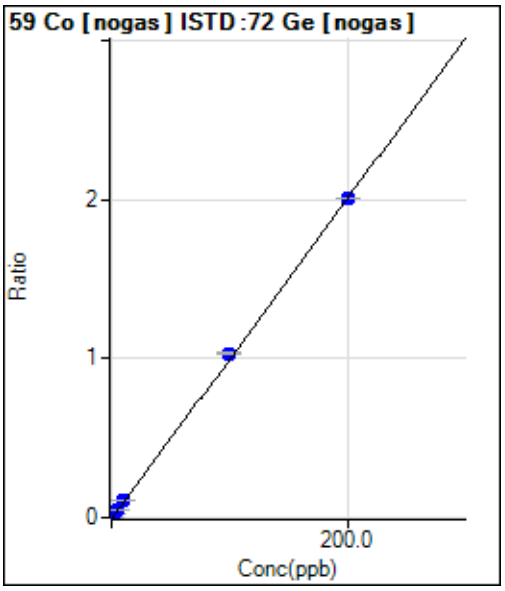


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19853.53	0.0394	P	3.2	
2	☐	200.000	195.295	1135801.05	2.2481	P	1.5	-2.4
3	☐	500.000	457.522	2686307.15	5.2137	P	0.6	-8.5
4	☐	1000.000	1083.490	6287651.78	12.2930	A	0.1	8.3
5	☐	10000.00	10329.06	60842164.09	116.854	A	0.4	3.3
6	☐	20000.00	19832.40	115651948.2	224.330	A	2.0	-0.8
7	☐	100.000						

y = 0.0113 * x + 0.0394
R = 0.9998
DL = 0.3324 ppb
BEC = 3.486 ppb

Weight: <None>
Min Conc: <None>

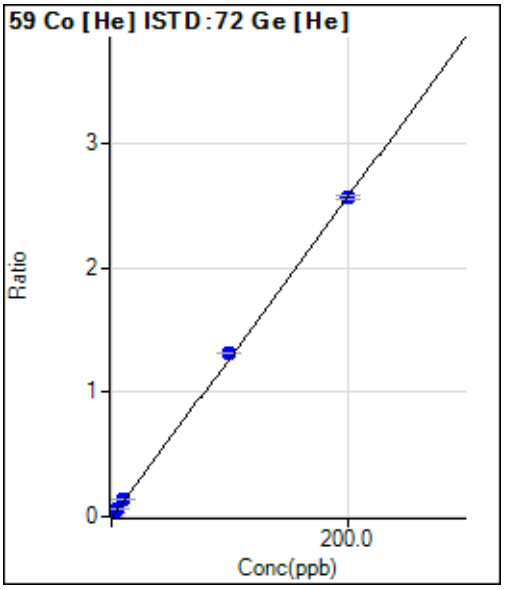
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	4.7	
2	☐	2.000	2.209	30477.93	0.0224	P	2.5	10.4
3	☐	5.000	5.264	73559.53	0.0533	P	0.9	5.3
4	☐	10.000	10.441	146779.96	0.1056	P	0.4	4.4
5	☐	100.000	102.147	1465755.03	1.0317	P	1.2	2.1
6	☐	200.000	198.896	2830888.50	2.0087	P	0.4	-0.6
7	☐	1.000						

y = 0.0101 * x + 1.1017E-004
R = 0.9999
DL = 0.001554 ppb
BEC = 0.01091 ppb

Weight: <None>
Min Conc: <None>

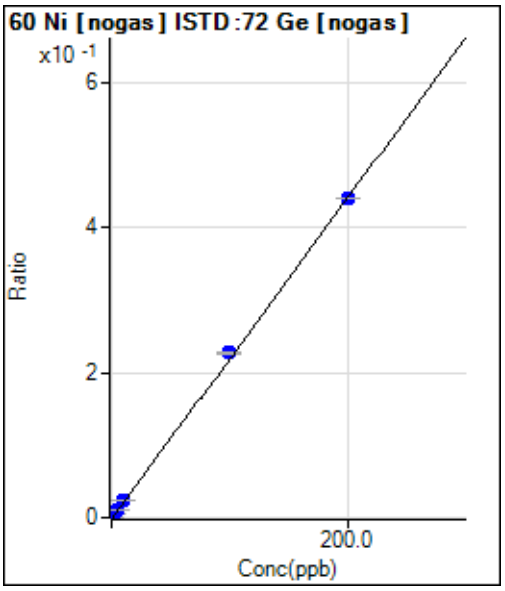


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	99.	
2	☐	2.000	2.204	14410.48	0.0285	P	3.3	10.2
3	☐	5.000	5.254	35007.62	0.0679	P	1.9	5.1
4	☐	10.000	10.462	69179.26	0.1353	P	1.1	4.6
5	☐	100.000	102.024	686510.83	1.3186	P	0.8	2.0
6	☐	200.000	198.956	1325589.77	2.5713	P	1.5	-0.5
7	☐	1.000						

y = 0.0129 * x + 4.6405E-005
R = 0.9999
DL = 0.01069 ppb
BEC = 0.003591 ppb

Weight: <None>
Min Conc: <None>

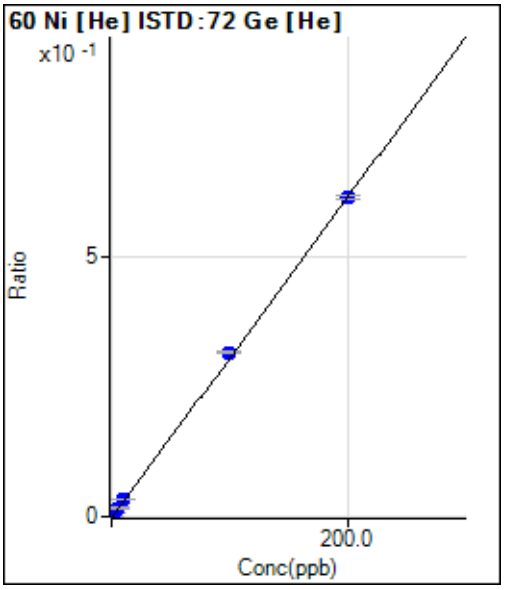
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	350.01	0.0003	P	24.	
2	☐	2.000	2.379	7515.32	0.0055	P	2.2	19.0
3	☐	5.000	5.123	16022.11	0.0116	P	2.7	2.5
4	☐	10.000	10.448	32542.19	0.0234	P	2.4	4.5
5	☐	100.000	102.614	323229.41	0.2275	P	1.5	2.6
6	☐	200.000	198.664	620353.41	0.4402	P	0.3	-0.7
7	☐	1.000						

y = 0.0022 * x + 2.5794E-004
R = 0.9999
DL = 0.0843 ppb
BEC = 0.1165 ppb

Weight: <None>
Min Conc: <None>

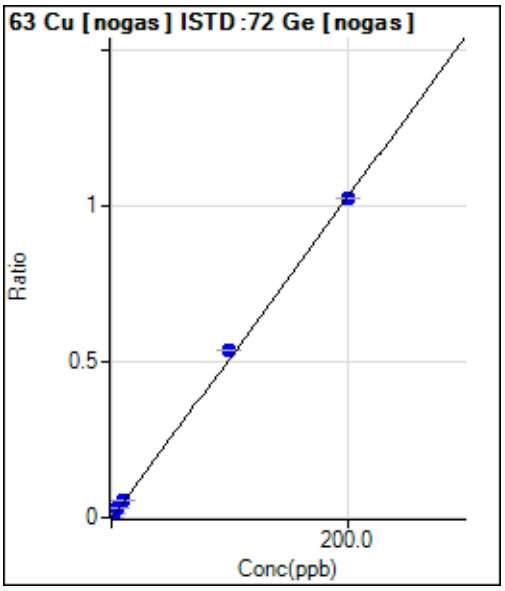


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	166.67	0.0003	P	34.	
2	☐	2.000	2.333	3800.54	0.0075	P	2.9	16.6
3	☐	5.000	5.256	8519.23	0.0165	P	4.0	5.1
4	☐	10.000	10.737	17096.62	0.0334	P	3.3	7.4
5	☐	100.000	102.151	164138.46	0.3153	P	0.5	2.2
6	☐	200.000	198.878	316274.53	0.6135	P	0.7	-0.6
7	☐	1.000						

y = 0.0031 * x + 3.3076E-004
R = 0.9999
DL = 0.111 ppb
BEC = 0.1073 ppb

Weight: <None>
Min Conc: <None>

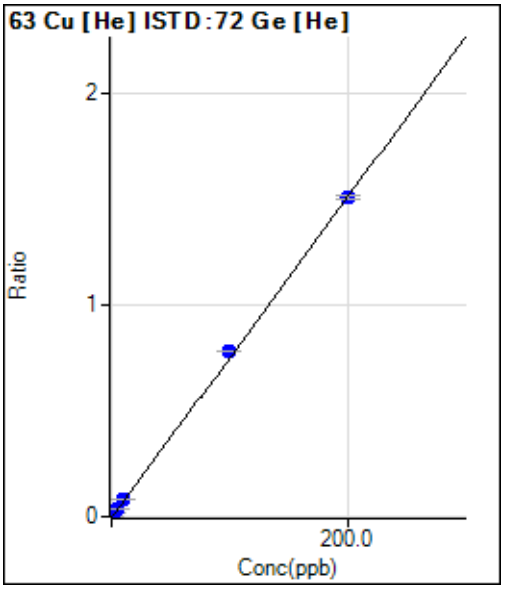
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1866.82	0.0014	P	3.6	
2	☐	2.000	2.336	18274.74	0.0134	P	2.0	16.8
3	☐	5.000	5.244	39311.84	0.0285	P	0.3	4.9
4	☐	10.000	10.538	77647.24	0.0558	P	1.2	5.4
5	☐	100.000	103.606	762677.18	0.5368	P	0.9	3.6
6	☐	200.000	198.160	1445057.63	1.0254	P	0.1	-0.9
7	☐	1.000						

y = 0.0052 * x + 0.0014
R = 0.9998
DL = 0.02884 ppb
BEC = 0.2655 ppb

Weight: <None>
Min Conc: <None>

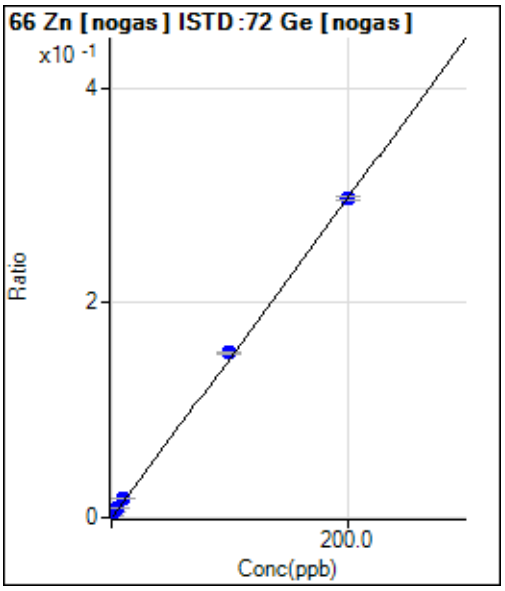


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1036.72	0.0021	P	3.3	
2	☐	2.000	2.280	9796.70	0.0194	P	4.0	14.0
3	☐	5.000	5.071	20918.18	0.0406	P	0.9	1.4
4	☐	10.000	10.398	41467.71	0.0811	P	1.9	4.0
5	☐	100.000	102.535	406773.82	0.7813	P	0.6	2.5
6	☐	200.000	198.708	779572.05	1.5121	P	1.0	-0.6
7	☐	1.000						

y = 0.0076 * x + 0.0021
R = 0.9999
DL = 0.02685 ppb
BEC = 0.2709 ppb

Weight: <None>
Min Conc: <None>

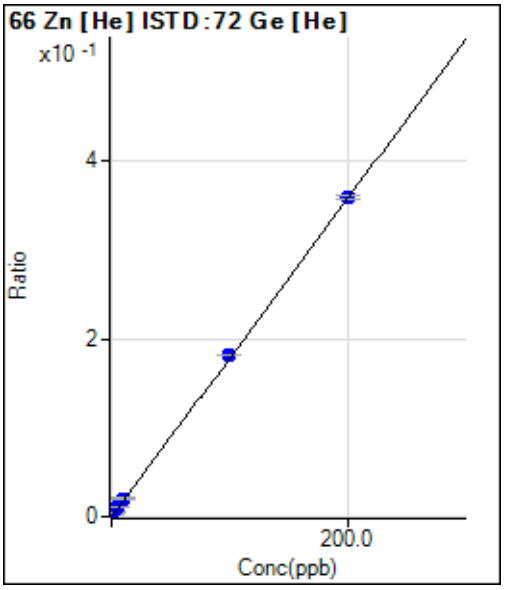
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1330.09	0.0010	P	15.	
2	☐	2.000	2.667	6731.64	0.0050	P	7.5	33.3
3	☐	5.000	5.352	12371.97	0.0090	P	1.8	7.0
4	☐	10.000	10.839	23842.62	0.0171	P	1.3	8.4
5	☐	100.000	102.179	217921.49	0.1533	P	1.1	2.2
6	☐	200.000	198.853	419245.32	0.2975	P	0.8	-0.6
7	☐	1.000						

y = 0.0015 * x + 9.7880E-004
R = 0.9999
DL = 0.2951 ppb
BEC = 0.6564 ppb

Weight: <None>
Min Conc: <None>

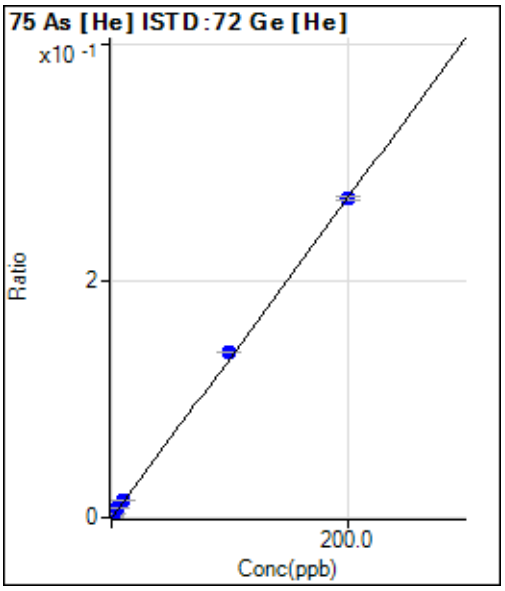


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0013	P	7.6	
2	☐	2.000	2.389	2796.97	0.0055	P	6.1	19.4
3	☐	5.000	5.398	5637.82	0.0109	P	5.2	8.0
4	☐	10.000	10.656	10420.45	0.0204	P	5.0	6.6
5	☐	100.000	100.618	94678.12	0.1818	P	0.6	0.6
6	☐	200.000	199.645	185389.64	0.3596	P	0.9	-0.2
7	☐	1.000						

y = 0.0018 * x + 0.0013
R = 1.0000
DL = 0.1581 ppb
BEC = 0.6967 ppb

Weight: <None>
Min Conc: <None>

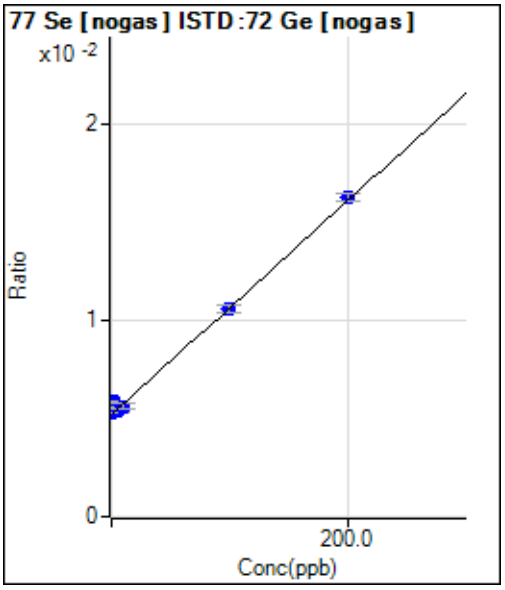
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	396.67	0.0008	P	13.	
2	☐	2.000	2.172	1886.80	0.0037	P	8.1	8.6
3	☐	5.000	5.045	3931.66	0.0076	P	4.1	0.9
4	☐	10.000	10.192	7474.13	0.0146	P	2.2	1.9
5	☐	100.000	102.516	72825.94	0.1399	P	0.6	2.5
6	☐	200.000	198.729	139404.95	0.2704	P	1.5	-0.6
7	☐	1.000						

y = 0.0014 * x + 7.8707E-004
R = 0.9999
DL = 0.2398 ppb
BEC = 0.5801 ppb

Weight: <None>
Min Conc: <None>

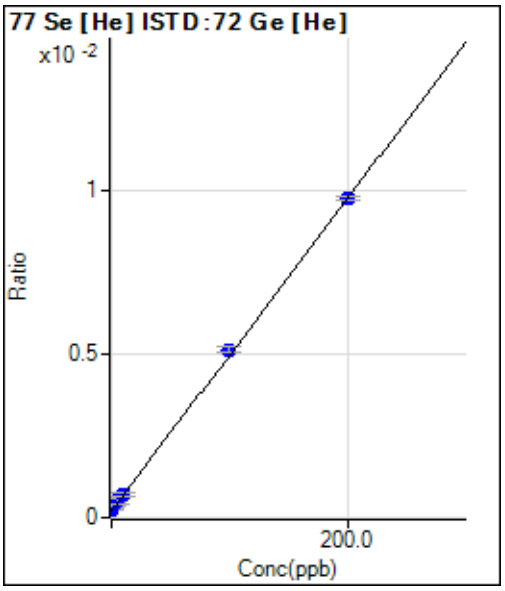


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7188.53	0.0053	P	3.6	
2	☐	2.000	10.206	7938.89	0.0058	P	1.1	410.
3	☐	5.000	2.238	7468.66	0.0054	P	6.0	-55.2
4	☐	10.000	5.676	7782.15	0.0056	P	5.4	-43.2
5	☐	100.000	96.678	14971.14	0.0105	P	3.8	-3.3
6	☐	200.000	201.864	22911.21	0.0163	P	2.9	0.9
7	☐	1.000						

y = 5.4399E-005 * x + 0.0053
R = 0.9984
DL = 10.6 ppb
BEC = 97.15 ppb

Weight: <None>
Min Conc: <None>

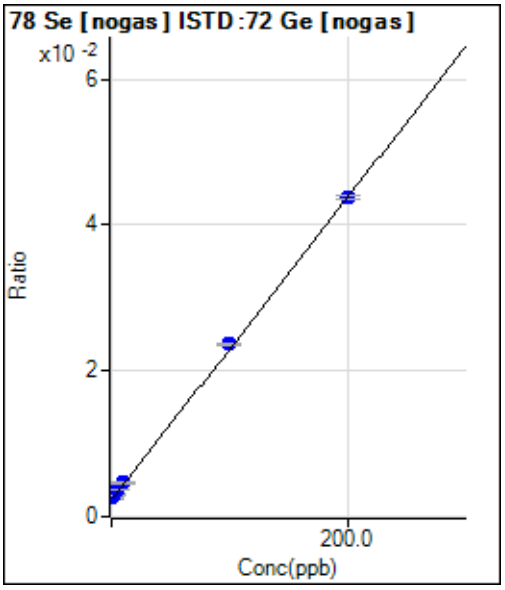
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0003	P	8.0	
2	☐	2.000	3.265	210.01	0.0004	P	32.	63.3
3	☐	5.000	5.136	260.01	0.0005	P	33.	2.7
4	☐	10.000	9.162	356.68	0.0007	P	11.	-8.4
5	☐	100.000	102.221	2683.63	0.0052	P	4.2	2.2
6	☐	200.000	198.915	5044.28	0.0098	P	1.3	-0.5
7	☐	1.000						

y = 4.7890E-005 * x + 2.5816E-004
R = 0.9999
DL = 1.293 ppb
BEC = 5.391 ppb

Weight: <None>
Min Conc: <None>

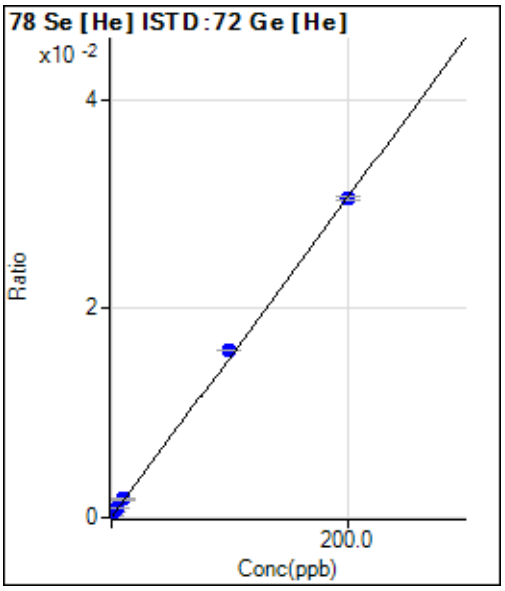


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3410.45	0.0025	P	5.8	
2	☐	2.000	2.396	4087.31	0.0030	P	3.8	19.8
3	☐	5.000	5.545	5050.99	0.0037	P	3.8	10.9
4	☐	10.000	10.553	6531.56	0.0047	P	5.3	5.5
5	☐	100.000	102.028	33658.60	0.0237	P	1.4	2.0
6	☐	200.000	198.941	61721.67	0.0438	P	0.6	-0.5
7	☐	1.000						

y = 2.0752E-004 * x + 0.0025
R = 0.9999
DL = 2.086 ppb
BEC = 12.09 ppb

Weight: <None>
Min Conc: <None>

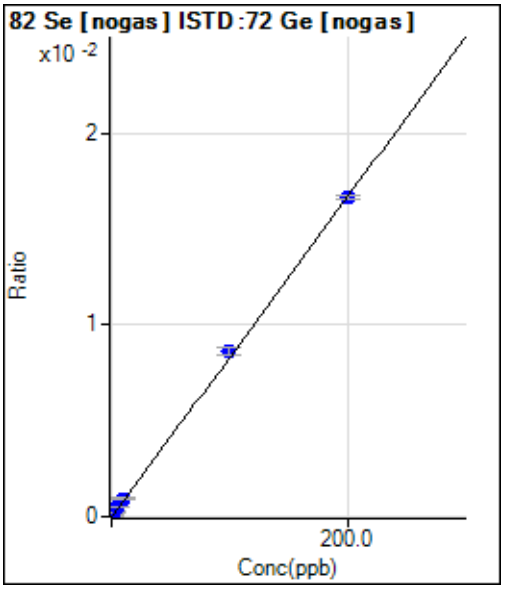
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0002	P	6.3	
2	☐	2.000	2.357	286.00	0.0006	P	13.	17.9
3	☐	5.000	5.029	502.68	0.0010	P	3.3	0.6
4	☐	10.000	10.160	900.70	0.0018	P	5.6	1.6
5	☐	100.000	103.247	8341.02	0.0160	P	0.8	3.2
6	☐	200.000	198.364	15769.70	0.0306	P	1.5	-0.8
7	☐	1.000						

y = 1.5317E-004 * x + 2.0523E-004
R = 0.9998
DL = 0.2516 ppb
BEC = 1.34 ppb

Weight: <None>
Min Conc: <None>

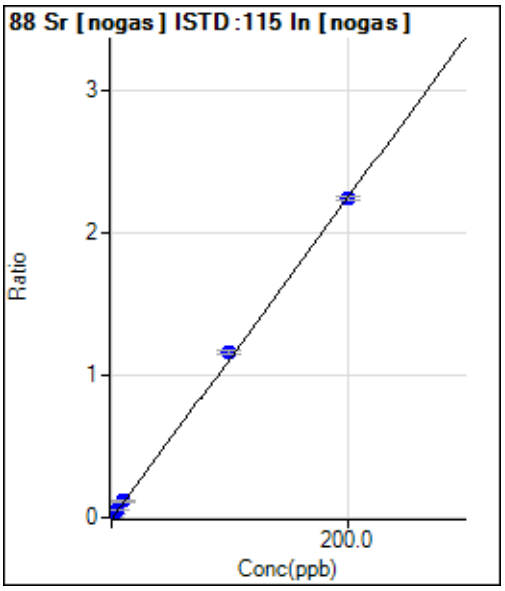


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	66.67	0.0000	P	29.	
2	☐	2.000	2.167	313.34	0.0002	P	28.	8.3
3	☐	5.000	5.538	706.70	0.0005	P	7.1	10.8
4	☐	10.000	10.458	1283.41	0.0009	P	9.7	4.6
5	☐	100.000	102.835	12271.94	0.0086	P	4.6	2.8
6	☐	200.000	198.545	23459.04	0.0166	P	1.4	-0.7
7	☐	1.000						

y = 8.3577E-005 * x + 4.8816E-005
R = 0.9999
DL = 0.5126 ppb
BEC = 0.5841 ppb

Weight: <None>
Min Conc: <None>

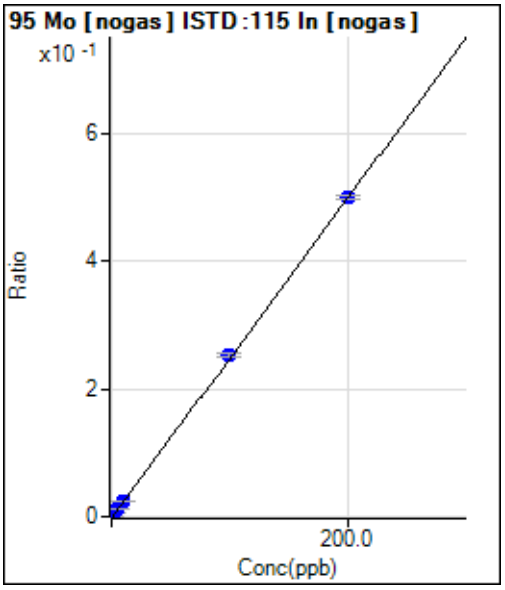
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.68	0.0003	P	9.8	
2	☐	2.000	2.146	35162.42	0.0245	P	1.8	7.3
3	☐	5.000	5.090	83995.47	0.0577	P	3.4	1.8
4	☐	10.000	10.166	168299.82	0.1149	P	3.6	1.7
5	☐	100.000	102.853	1723891.17	1.1600	P	2.3	2.9
6	☐	200.000	198.561	3331933.91	2.2392	P	1.6	-0.7
7	☐	1.000						

y = 0.0113 * x + 3.1290E-004
R = 0.9999
DL = 0.008123 ppb
BEC = 0.02775 ppb

Weight: <None>
Min Conc: <None>

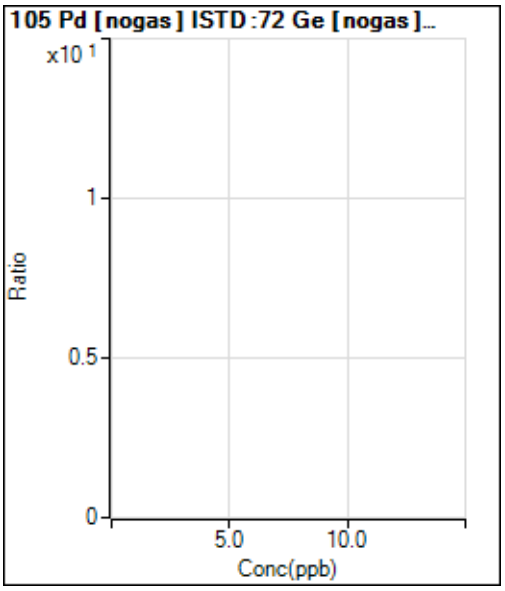


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	263.34	0.0002	P	27.	
2	☐	2.000	2.074	7715.51	0.0054	P	3.2	3.7
3	☐	5.000	5.037	18632.07	0.0128	P	3.1	0.7
4	☐	10.000	9.937	36712.83	0.0251	P	3.1	-0.6
5	☐	100.000	101.087	376531.91	0.2534	P	2.5	1.1
6	☐	200.000	199.458	743598.01	0.4998	P	1.1	-0.3
7	☐	1.000						

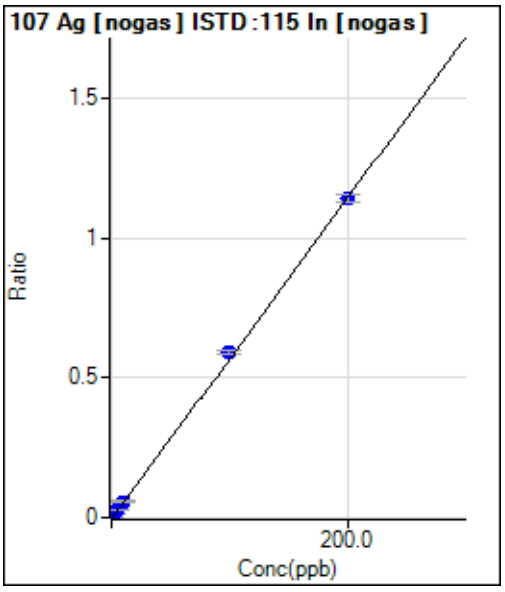
y = 0.0025 * x + 1.8410E-004
R = 1.0000
DL = 0.06131 ppb
BEC = 0.0735 ppb

Weight: <None>
Min Conc: <None>

Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

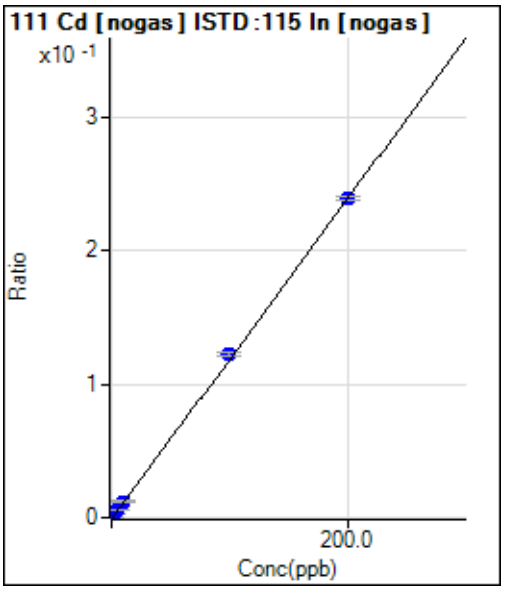


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120.00	0.0001	P	21.	
2	☐	2.000	2.180	18124.89	0.0126	P	3.4	9.0
3	☐	5.000	5.105	42906.91	0.0295	P	2.5	2.1
4	☐	10.000	10.085	85158.40	0.0582	P	2.8	0.9
5	☐	100.000	102.870	880260.77	0.5924	P	1.3	2.9
6	☐	200.000	198.556	1701530.23	1.1434	P	2.3	-0.7
7	☐	1.000						

y = 0.0058 * x + 8.4000E-005
R = 0.9999
DL = 0.009549 ppb
BEC = 0.01459 ppb

Weight: <None>
Min Conc: <None>

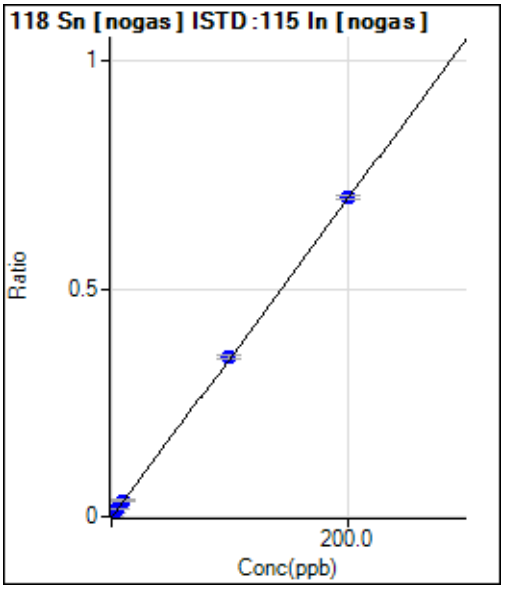
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.	
2	☐	2.000	2.139	3710.55	0.0026	P	6.8	7.0
3	☐	5.000	5.133	9009.64	0.0062	P	3.9	2.7
4	☐	10.000	10.076	17774.49	0.0121	P	4.7	0.8
5	☐	100.000	101.857	182202.05	0.1226	P	1.9	1.9
6	☐	200.000	199.063	356536.01	0.2396	P	1.4	-0.5
7	☐	1.000						

y = 0.0012 * x + 1.1743E-005
R = 0.9999
DL = 0.02689 ppb
BEC = 0.009756 ppb

Weight: <None>
Min Conc: <None>

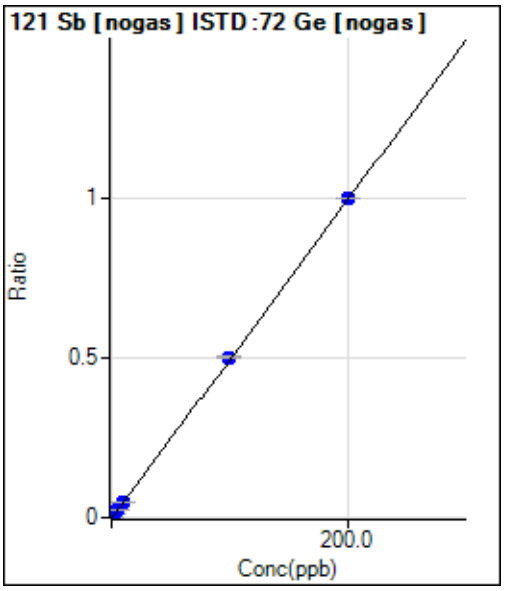


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1923.50	0.0013	P	7.3	
2	☐	2.000	2.089	12428.91	0.0087	P	3.9	4.5
3	☐	5.000	4.782	26347.78	0.0181	P	3.8	-4.4
4	☐	10.000	9.750	51980.46	0.0355	P	4.5	-2.5
5	☐	100.000	100.073	523005.88	0.3519	P	3.0	0.1
6	☐	200.000	199.981	1044415.06	0.7019	P	1.5	0.0
7	☐	1.000						

y = 0.0035 * x + 0.0013
R = 1.0000
DL = 0.08459 ppb
BEC = 0.3846 ppb

Weight: <None>
Min Conc: <None>

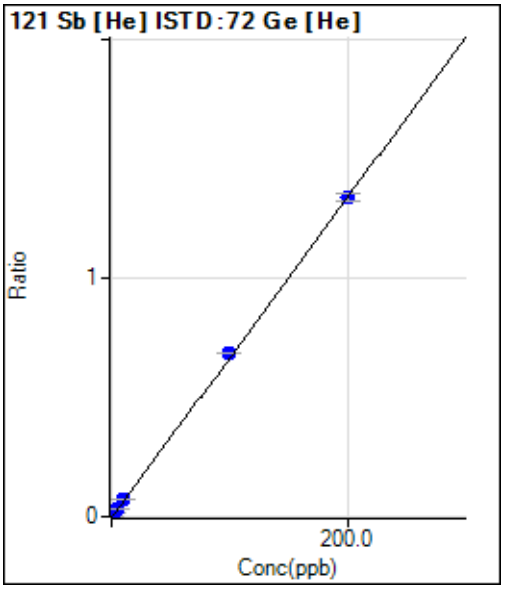
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1603.45	0.0012	P	5.4	
2	☐	2.000	2.052	15518.58	0.0114	P	1.2	2.6
3	☐	5.000	4.963	35808.08	0.0259	P	1.9	-0.7
4	☐	10.000	9.923	70454.90	0.0507	P	1.5	-0.8
5	☐	100.000	100.223	712025.38	0.5011	P	1.2	0.2
6	☐	200.000	199.893	1406823.42	0.9982	P	0.4	-0.1
7	☐	1.000						

y = 0.0050 * x + 0.0012
R = 1.0000
DL = 0.0386 ppb
BEC = 0.2364 ppb

Weight: <None>
Min Conc: <None>

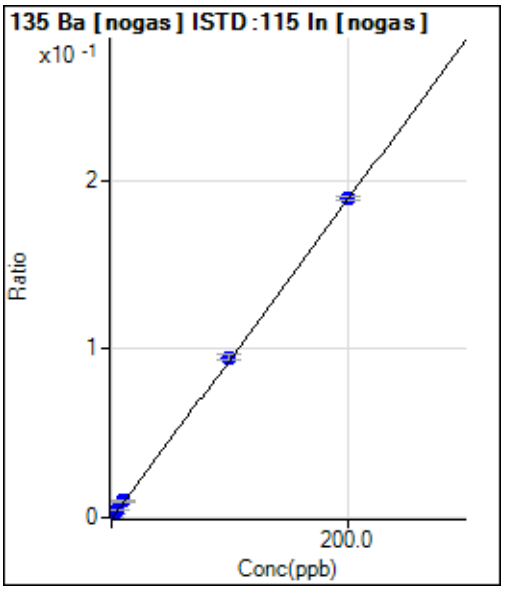


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	976.72	0.0019	P	6.9	
2	☐	2.000	2.002	7778.90	0.0154	P	4.4	0.1
3	☐	5.000	4.881	17901.41	0.0347	P	3.3	-2.4
4	☐	10.000	10.127	35801.42	0.0700	P	1.6	1.3
5	☐	100.000	102.157	358468.06	0.6885	P	0.2	2.2
6	☐	200.000	198.918	690181.78	1.3388	P	1.9	-0.5
7	☐	1.000						

y = 0.0067 * x + 0.0019
R = 0.9999
DL = 0.05941 ppb
BEC = 0.2887 ppb

Weight: <None>
Min Conc: <None>

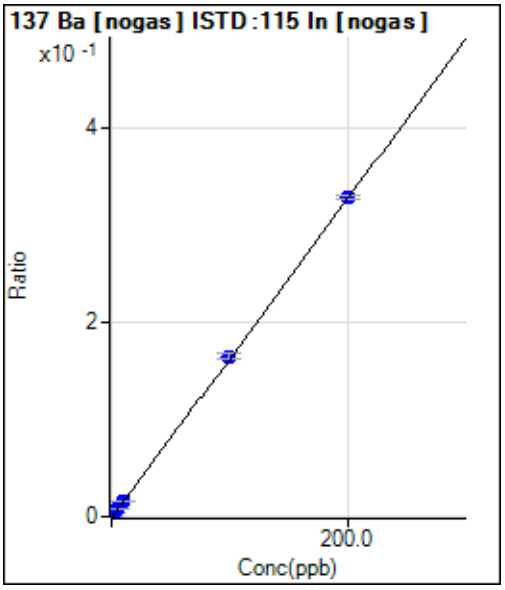
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	27.	
2	☐	2.000	2.169	2993.70	0.0021	P	8.8	8.5
3	☐	5.000	5.028	6981.80	0.0048	P	4.1	0.6
4	☐	10.000	10.240	14257.37	0.0097	P	6.6	2.4
5	☐	100.000	100.370	141459.89	0.0952	P	2.7	0.4
6	☐	200.000	199.801	281879.07	0.1895	P	1.3	-0.1
7	☐	1.000						

y = 9.4805E-004 * x + 3.0392E-005
R = 1.0000
DL = 0.02633 ppb
BEC = 0.03206 ppb

Weight: <None>
Min Conc: <None>

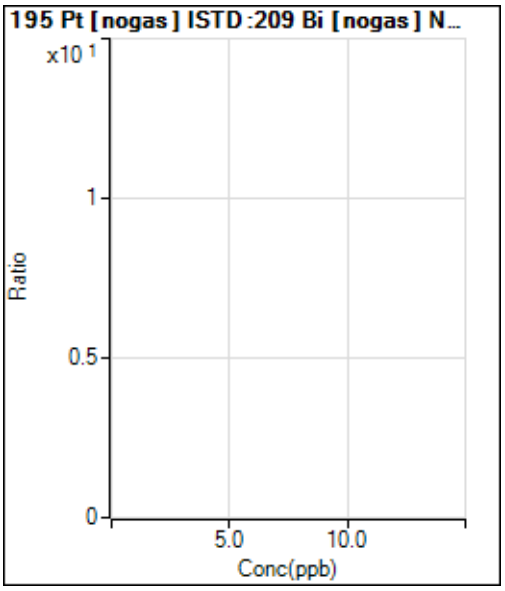


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	40.	
2	☐	2.000	2.078	4994.29	0.0035	P	2.7	3.9
3	☐	5.000	4.824	11631.59	0.0080	P	4.6	-3.5
4	☐	10.000	9.965	24063.92	0.0164	P	2.1	-0.3
5	☐	100.000	100.466	245259.55	0.1650	P	2.6	0.5
6	☐	200.000	199.772	488203.18	0.3281	P	1.6	-0.1
7	☐	1.000						

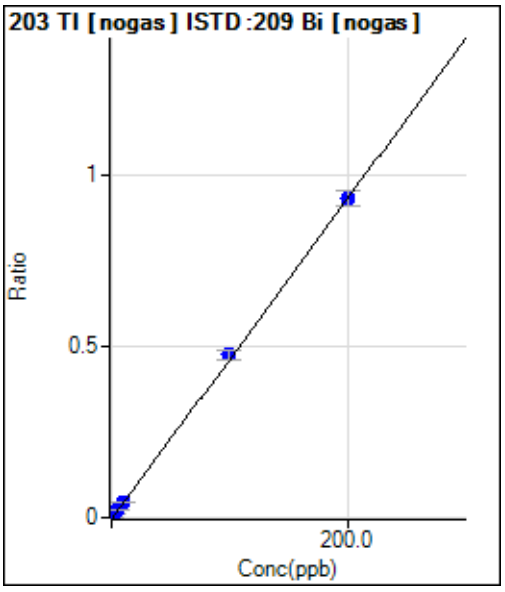
y = 0.0016 * x + 7.0116E-005
R = 1.0000
DL = 0.0521 ppb
BEC = 0.0427 ppb

Weight: <None>
Min Conc: <None>

Calibration for 132_ICV.d



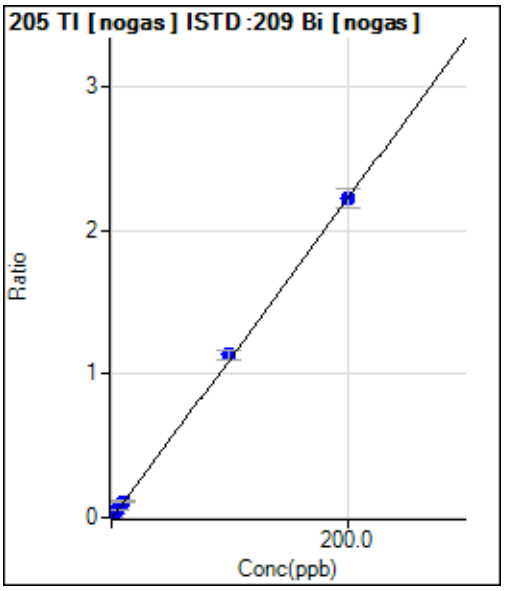
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	30.	
2	☐	2.000	2.151	12479.21	0.0101	P	5.5	7.6
3	☐	5.000	5.042	29448.80	0.0236	P	6.0	0.8
4	☐	10.000	9.872	57849.08	0.0462	P	4.0	-1.3
5	☐	100.000	101.796	613713.33	0.4759	P	5.9	1.8
6	☐	200.000	199.106	1224286.47	0.9309	P	5.4	-0.4
7	☐	1.000						

y = 0.0047 * x + 5.1395E-005
R = 0.9999
DL = 0.009937 ppb
BEC = 0.01099 ppb

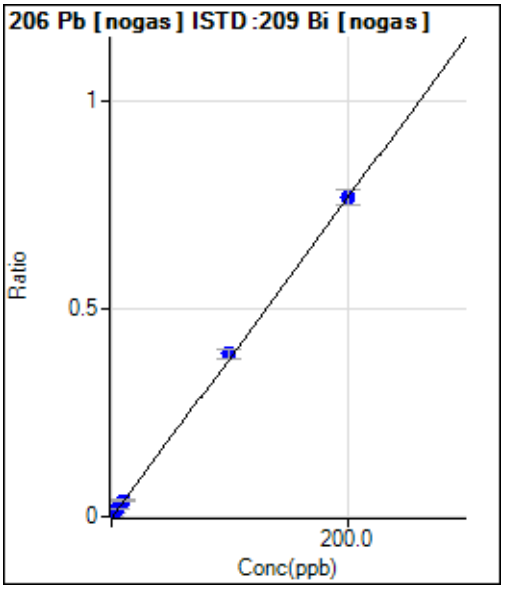
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	110.00	0.0001	P	33.	
2	☐	2.000	2.109	29171.43	0.0236	P	7.8	5.5
3	☐	5.000	5.052	70364.83	0.0565	P	9.5	1.0
4	☐	10.000	10.048	140575.23	0.1123	P	5.6	0.5
5	☐	100.000	101.868	1466986.07	1.1377	P	5.8	1.9
6	☐	200.000	199.061	2923630.79	2.2230	P	6.2	-0.5
7	☐	1.000						

y = 0.0112 * x + 8.9720E-005
R = 0.9999
DL = 0.007953 ppb
BEC = 0.008034 ppb

Weight: <None>
Min Conc: <None>

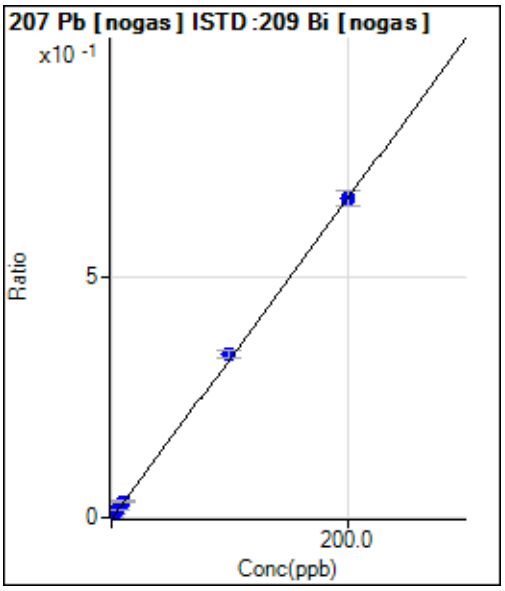


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	330.01	0.0003	P	18.	
2	☐	2.000	2.124	10457.52	0.0085	P	6.8	6.2
3	☐	5.000	4.947	24144.98	0.0194	P	8.0	-1.1
4	☐	10.000	10.086	49105.41	0.0392	P	5.7	0.9
5	☐	100.000	101.549	506174.05	0.3926	P	6.2	1.5
6	☐	200.000	199.221	1012548.82	0.7699	P	5.2	-0.4
7	☐	1.000						

y = 0.0039 * x + 2.7001E-004
R = 1.0000
DL = 0.03913 ppb
BEC = 0.0699 ppb

Weight: <None>
Min Conc: <None>

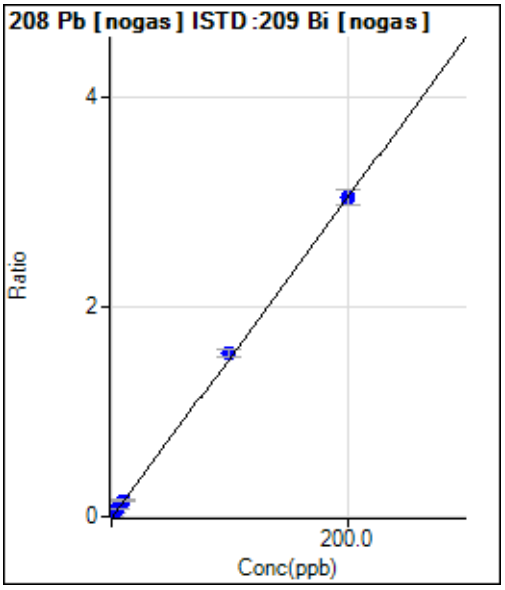
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306.68	0.0003	P	9.3	
2	☐	2.000	2.065	8772.97	0.0071	P	8.7	3.3
3	☐	5.000	5.015	21076.63	0.0169	P	8.1	0.3
4	☐	10.000	9.920	41567.06	0.0332	P	6.0	-0.8
5	☐	100.000	101.989	437334.68	0.3391	P	5.6	2.0
6	☐	200.000	199.008	870081.39	0.6615	P	4.7	-0.5
7	☐	1.000						

y = 0.0033 * x + 2.5104E-004
R = 0.9999
DL = 0.02115 ppb
BEC = 0.07555 ppb

Weight: <None>
Min Conc: <None>

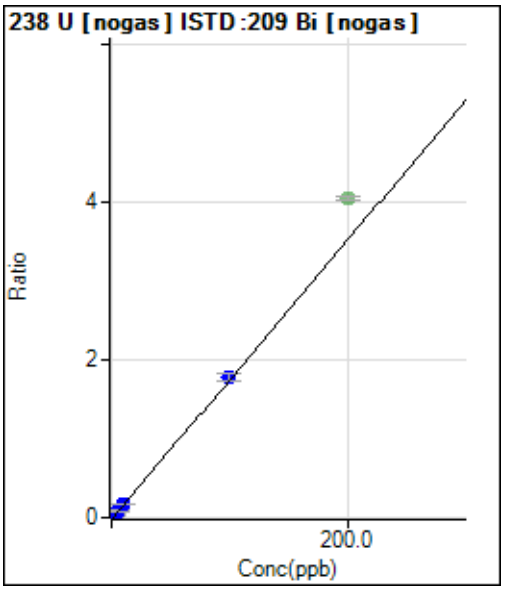


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1413.39	0.0012	P	8.0	
2	☐	2.000	2.115	41408.72	0.0336	P	6.7	5.8
3	☐	5.000	5.022	97287.85	0.0781	P	7.3	0.4
4	☐	10.000	10.026	193642.99	0.1547	P	5.2	0.3
5	☐	100.000	101.824	2012357.76	1.5606	P	5.5	1.8
6	☐	200.000	199.085	4011600.85	3.0501	P	5.1	-0.5
7	☐	1.000						

y = 0.0153 * x + 0.0012
R = 0.9999
DL = 0.01821 ppb
BEC = 0.07546 ppb

Weight: <None>
Min Conc: <None>

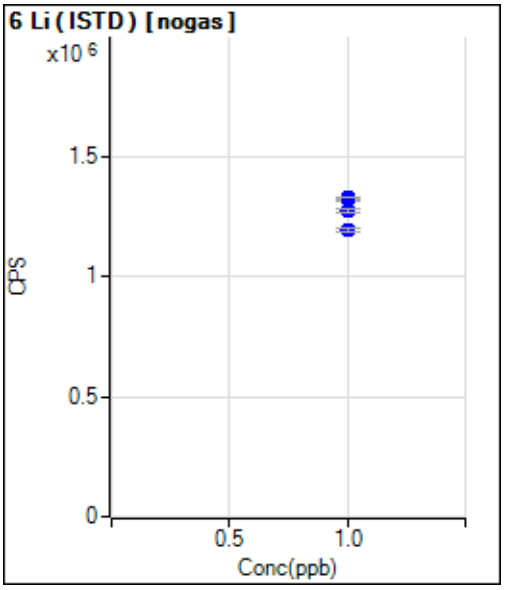
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	20.	
2	☐	2.000	2.001	43852.19	0.0355	P	7.2	0.1
3	☐	5.000	4.795	106011.49	0.0851	P	7.1	-4.1
4	☐	10.000	9.696	215174.32	0.1719	P	6.0	-3.0
5	☐	100.000	100.041	2286603.30	1.7733	P	5.8	0.0
6	☑	200.000		5331034.71	4.0522	A	1.2	
7	☐	1.000						

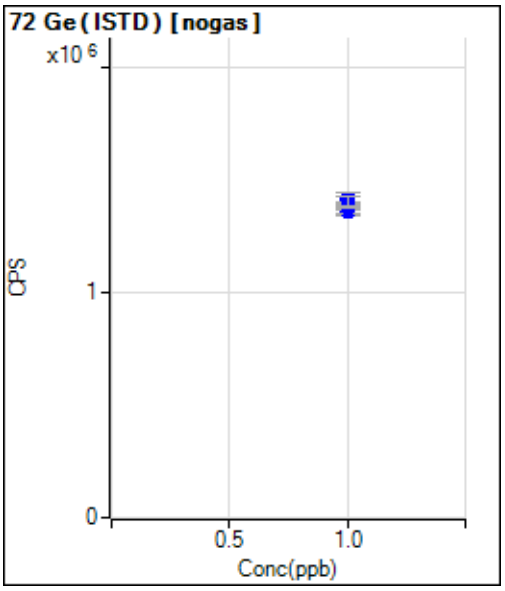
y = 0.0177 * x + 6.8181E-005
R = 1.0000
DL = 0.002309 ppb
BEC = 0.003847 ppb

Weight: <None>
Min Conc: <None>

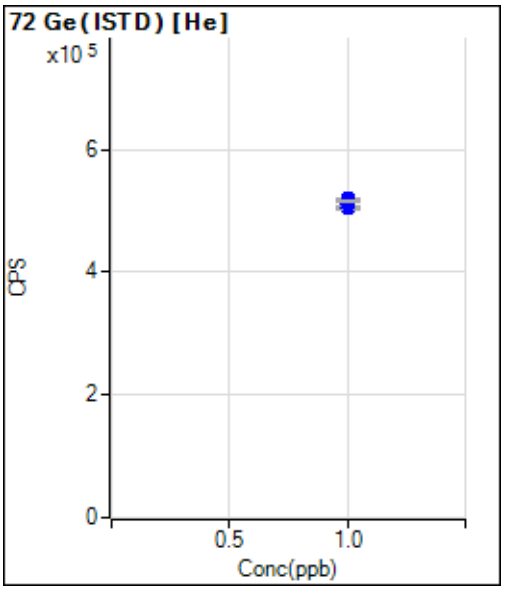


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1328725.24		P	1.0	
2	☐	1.000		1327805.50		P	0.5	
3	☐	1.000		1323334.42		P	0.7	
4	☐	1.000		1332615.13		P	0.4	
5	☐	1.000		1273794.22		P	1.2	
6	☐	1.000		1199394.14		P	1.2	
7	☐	1.000						

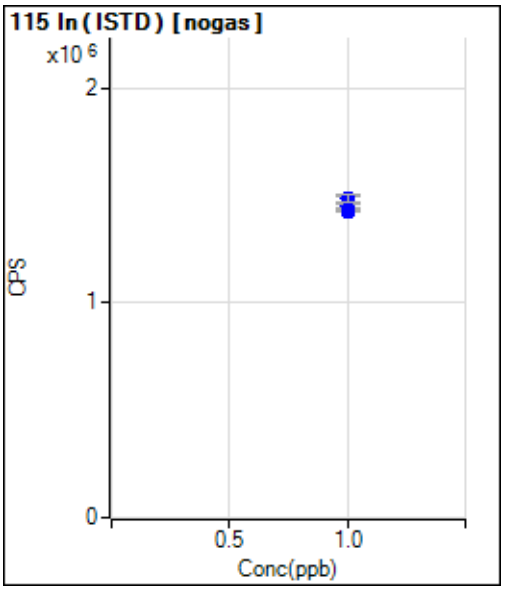
Calibration for 132_ICV.d



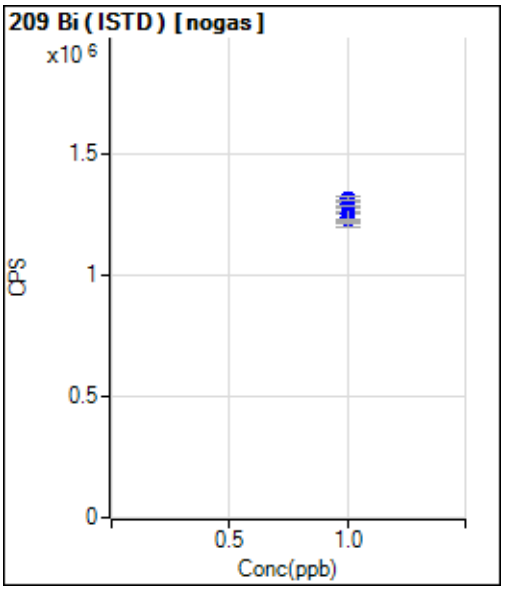
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360669.98		P	1.9	
2	☐	1.000		1359402.22		P	1.6	
3	☐	1.000		1380875.40		P	1.3	
4	☐	1.000		1390666.75		P	2.3	
5	☐	1.000		1420932.38		P	3.3	
6	☐	1.000		1409284.93		P	3.0	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		503650.34		P	0.9	
2	☐	1.000		505288.60		P	1.2	
3	☐	1.000		515253.01		P	0.7	
4	☐	1.000		511483.12		P	0.8	
5	☐	1.000		520660.35		P	0.6	
6	☐	1.000		515578.52		P	0.8	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1428209.93		P	1.0	
2	☐	1.000		1434337.43		P	0.1	
3	☐	1.000		1455792.72		P	1.2	
4	☐	1.000		1464539.59		P	0.8	
5	☐	1.000		1485684.98		P	1.7	
6	☐	1.000		1487726.19		P	2.2	
7	☐	1.000						



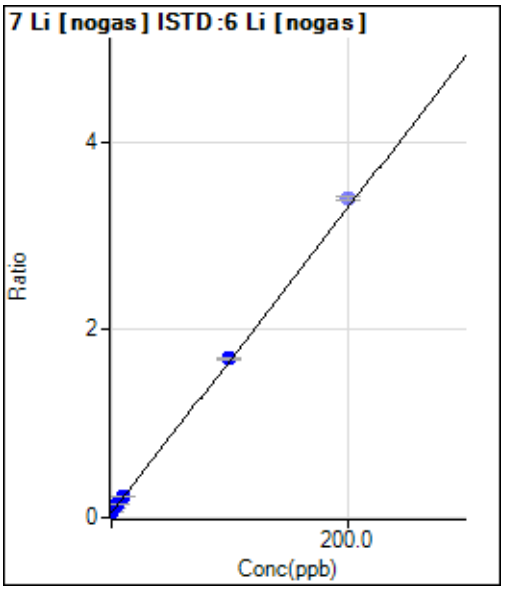
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1225173.55		P	4.8	
2	☐	1.000		1236494.02		P	4.4	
3	☐	1.000		1249031.20		P	4.8	
4	☐	1.000		1253252.95		P	3.5	
5	☐	1.000		1289996.13		P	1.1	
6	☐	1.000		1315704.56		P	1.1	
7	☐	1.000						

Calibration for 021_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 9:58:20 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	014CALB.d	CAL BLK	8/4/2023 10:35:41 AM
2	015CALS.d	2/10/200	8/4/2023 10:37:46 AM
3	016CALS.d	5/25/500	8/4/2023 10:39:48 AM
4	017CALS.d	10/50/1000	8/4/2023 10:41:50 AM
5	018CALS.d	100/500/10K	8/4/2023 10:43:53 AM
6	019CALS.d	200/1000/20K	8/4/2023 10:45:56 AM
7			

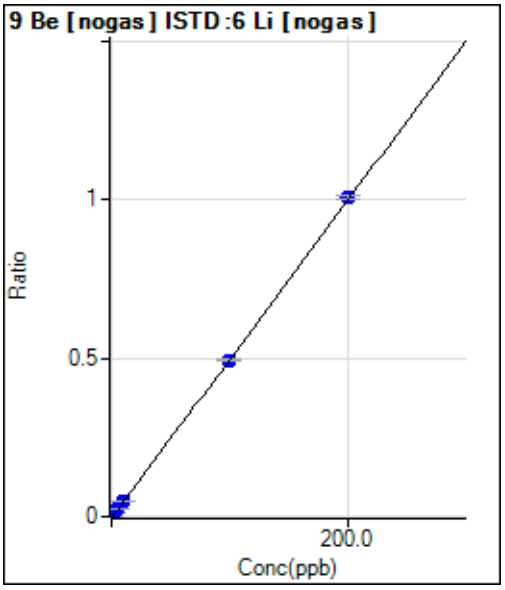
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73741.41	0.0701	P	1.1	
2	☐	2.000	1.939	107470.37	0.1016	P	0.7	-3.1
3	☐	5.000	4.750	155423.75	0.1472	P	0.2	-5.0
4	☐	10.000	9.517	237394.05	0.2247	P	0.8	-4.8
5	☐	100.000	100.062	1744731.90	1.6954	P	0.7	0.1
6	☑	200.000		3341690.47	3.4050	P	1.0	
7	☐	1.000						

y = 0.0162 * x + 0.0701
R = 1.0000
DL = 0.1459 ppb
BEC = 4.315 ppb

Weight: <None>
Min Conc: <None>

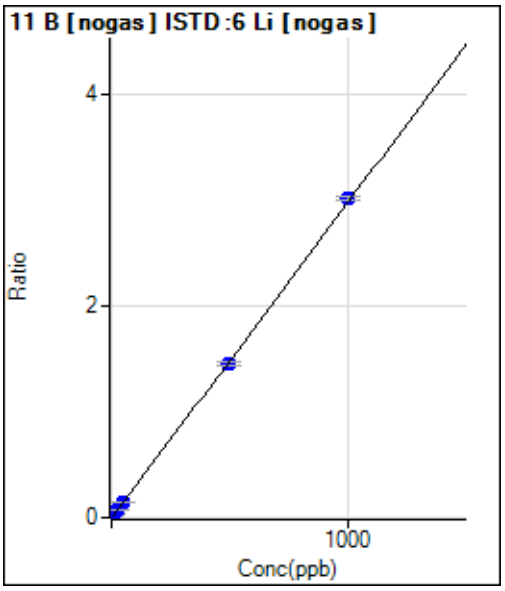


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28.33	0.0000	P	27.	
2	☐	2.000	1.888	10054.97	0.0095	P	1.9	-5.6
3	☐	5.000	4.585	24329.09	0.0230	P	2.1	-8.3
4	☐	10.000	9.322	49479.91	0.0468	P	1.1	-6.8
5	☐	100.000	98.362	508294.97	0.4939	P	0.6	-1.6
6	☐	200.000	200.864	989806.83	1.0086	P	1.1	0.4
7	☐	1.000						

y = 0.0050 * x + 2.6974E-005
R = 1.0000
DL = 0.004469 ppb
BEC = 0.005372 ppb

Weight: <None>
Min Conc: <None>

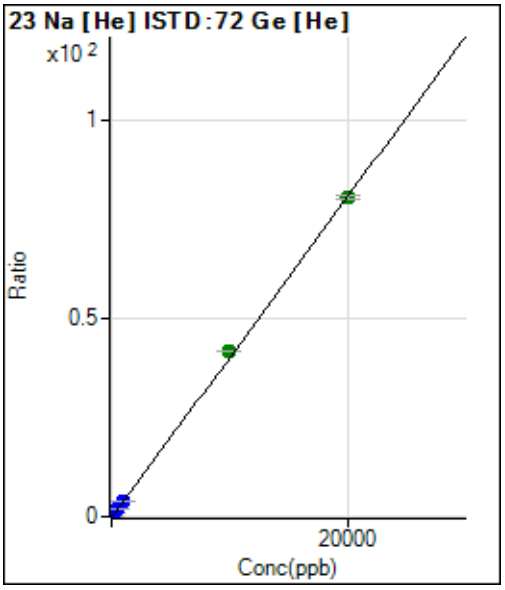
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9869.88	0.0094	P	2.6	
2	☐	10.000	9.387	39585.45	0.0374	P	1.4	-6.1
3	☐	25.000	22.643	81280.95	0.0770	P	0.8	-9.4
4	☐	50.000	46.121	155470.22	0.1471	P	1.6	-7.8
5	☐	500.000	483.056	1494729.82	1.4521	P	1.9	-3.4
6	☐	1000.000	1008.731	2965923.39	3.0221	P	1.4	0.9
7	☐	5.000						

y = 0.0030 * x + 0.0094
R = 0.9998
DL = 0.244 ppb
BEC = 3.141 ppb

Weight: <None>
Min Conc: <None>

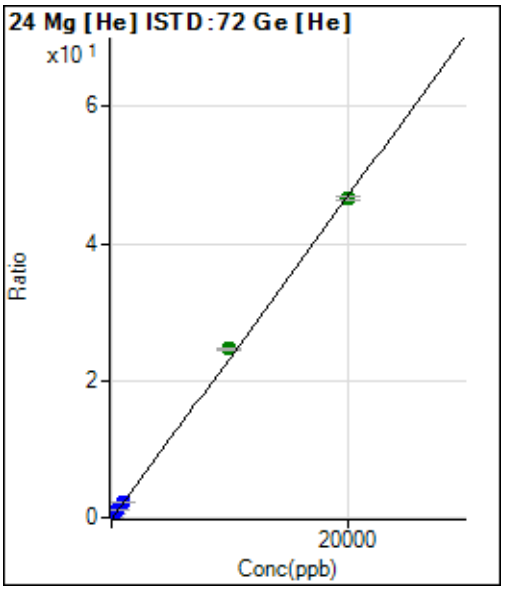


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39006.26	0.0921	P	0.4	
2	☐	200.000	209.093	402158.80	0.9409	P	0.7	4.5
3	☐	500.000	485.580	892108.61	2.0633	P	0.8	-2.9
4	☐	1000.000	966.935	1760617.63	4.0174	P	0.6	-3.3
5	☐	10000.00	10305.99	18645024.30	41.9300	A	0.4	3.1
6	☐	20000.00	19848.92	36389145.29	80.6702	A	0.8	-0.8
7	☐	100.000						

y = 0.0041 * x + 0.0921
R = 0.9998
DL = 0.2761 ppb
BEC = 22.68 ppb

Weight: <None>
Min Conc: <None>

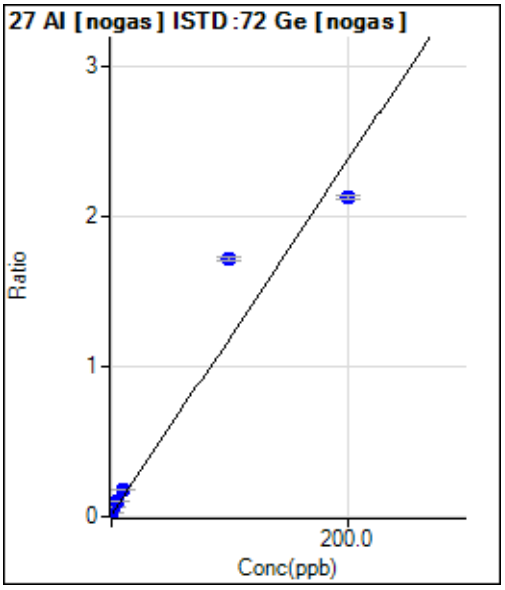
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	580.02	0.0014	P	4.2	
2	☐	200.000	206.965	209112.31	0.4892	P	0.5	3.5
3	☐	500.000	485.774	495706.31	1.1465	P	1.1	-2.8
4	☐	1000.000	966.902	999495.22	2.2806	P	0.5	-3.3
5	☐	10000.00	10459.63	10963916.09	24.6573	A	1.3	4.6
6	☐	20000.00	19772.12	21024539.27	46.6092	A	0.7	-1.1
7	☐	100.000						

y = 0.0024 * x + 0.0014
R = 0.9996
DL = 0.0731 ppb
BEC = 0.581 ppb

Weight: <None>
Min Conc: <None>

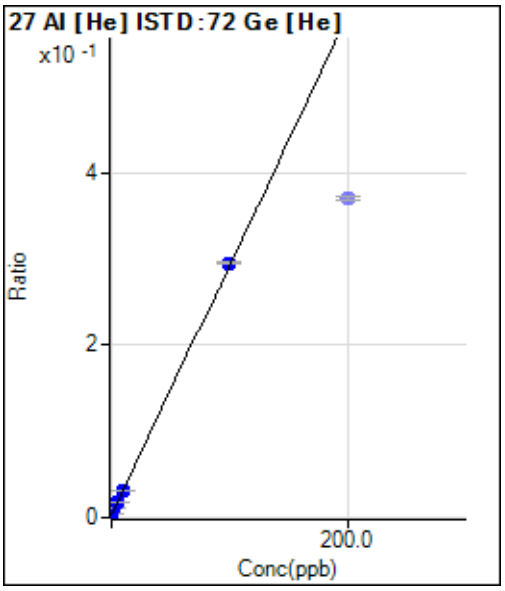


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25922.16	0.0234	P	4.6	
2	☐	2.000	3.364	70414.34	0.0632	P	1.0	68.2
3	☐	5.000	6.883	116864.18	0.1048	P	0.3	37.7
4	☐	10.000	13.185	202659.95	0.1794	P	0.3	31.9
5	☐	100.000	143.450	2011486.33	1.7211	P	2.0	43.5
6	☐	200.000	178.055	2539469.96	2.1306	P	0.8	-11.0
7	☐	1.000						

y = 0.0118 * x + 0.0234
R = 0.9659
DL = 0.2706 ppb
BEC = 1.976 ppb

Weight: <None>
Min Conc: <None>

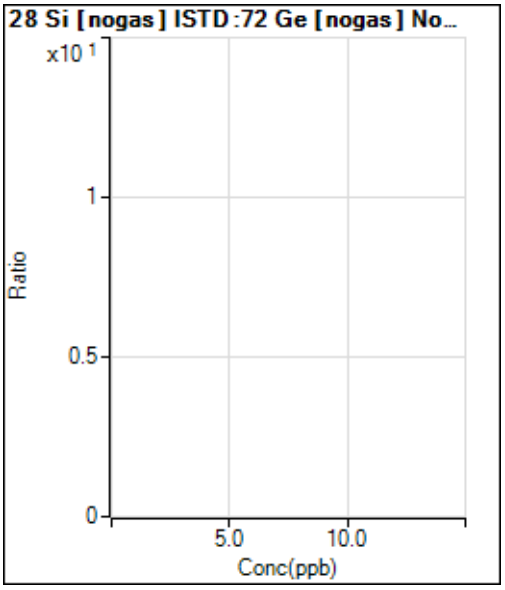
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1733.47	0.0041	P	3.9	
2	☐	2.000	2.553	4914.22	0.0115	P	4.6	27.6
3	☐	5.000	4.795	7785.48	0.0180	P	2.7	-4.1
4	☐	10.000	9.137	13412.71	0.0306	P	1.8	-8.6
5	☐	100.000	100.085	130973.74	0.2945	P	0.9	0.1
6	☑	200.000		166964.58	0.3701	P	1.1	
7	☐	1.000						

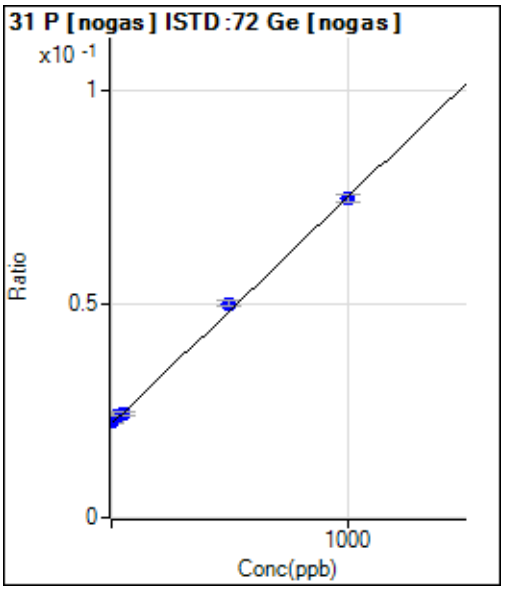
y = 0.0029 * x + 0.0041
R = 0.9999
DL = 0.1638 ppb
BEC = 1.409 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

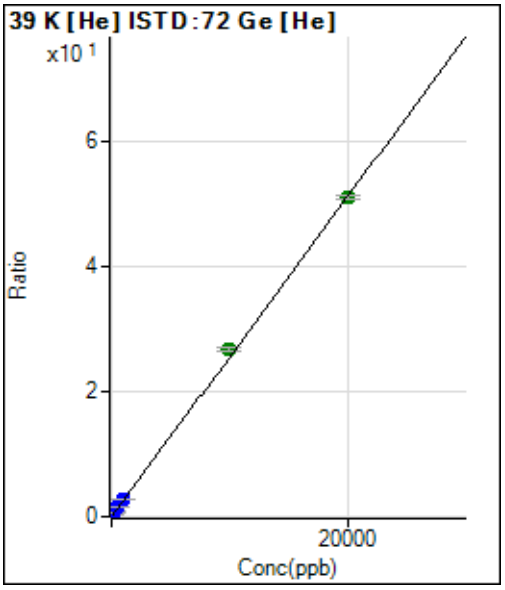
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	24790.33	0.0224	P	1.8	
2	☐	10.000	21.363	26169.51	0.0235	P	4.1	113.
3	☐	25.000	32.685	26857.19	0.0241	P	2.0	30.7
4	☐	50.000	37.885	27528.35	0.0244	P	2.4	-24.2
5	☐	500.000	523.909	58645.29	0.0502	P	2.3	4.8
6	☐	1000.000	988.345	89194.98	0.0749	P	1.9	-1.2
7	☐	5.000						

y = 5.3113E-005 * x + 0.0224
R = 0.9994
DL = 23.16 ppb
BEC = 421 ppb

Weight: <None>
Min Conc: <None>

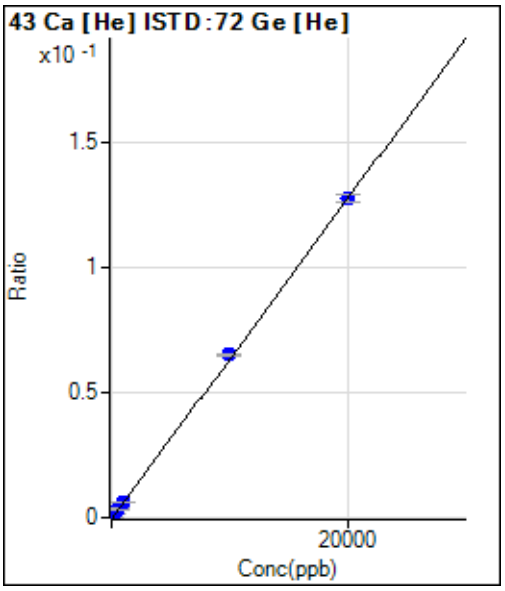


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	109758.80	0.2591	P	2.0	
2	☐	200.000	198.379	328057.89	0.7675	P	0.7	-0.8
3	☐	500.000	463.898	626047.60	1.4480	P	1.6	-7.2
4	☐	1000.000	922.371	1149513.58	2.6229	P	0.1	-7.8
5	☐	10000.00	10330.20	11886882.74	26.7326	A	1.8	3.3
6	☐	20000.00	19839.69	23050932.16	51.1027	A	1.7	-0.8
7	☐	100.000						

y = 0.0026 * x + 0.2591
R = 0.9998
DL = 5.955 ppb
BEC = 101.1 ppb

Weight: <None>
Min Conc: <None>

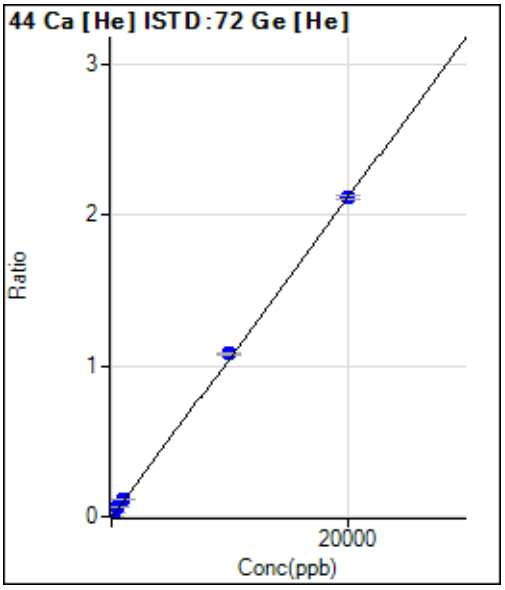
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	62.	
2	☐	200.000	202.785	590.02	0.0014	P	16.	1.4
3	☐	500.000	517.831	1470.10	0.0034	P	10.	3.6
4	☐	1000.000	968.222	2756.96	0.0063	P	2.3	-3.2
5	☐	10000.00	10178.31	29071.43	0.0654	P	1.2	1.8
6	☐	20000.00	19911.95	57659.63	0.1278	P	2.0	-0.4
7	☐	100.000						

y = 6.4157E-006 * x + 7.8975E-005
R = 0.9999
DL = 23.06 ppb
BEC = 12.31 ppb

Weight: <None>
Min Conc: <None>

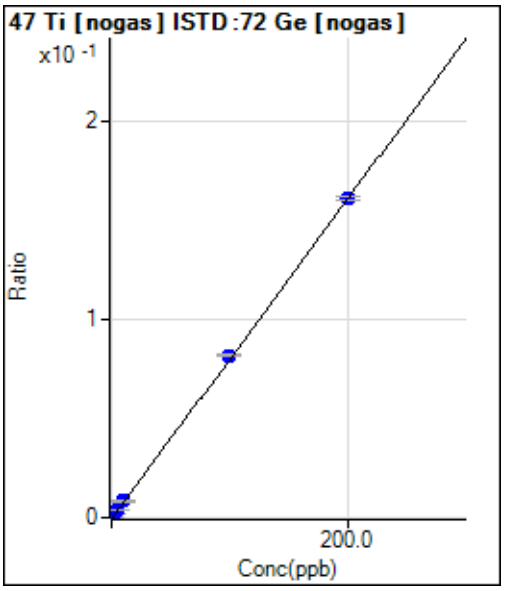


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1486.77	0.0035	P	10.	
2	☐	200.000	208.806	10977.49	0.0257	P	0.9	4.4
3	☐	500.000	513.922	25114.47	0.0581	P	0.8	2.8
4	☐	1000.000	1016.083	48825.43	0.1114	P	1.6	1.6
5	☐	10000.00	10140.49	480400.59	1.0804	P	0.4	1.4
6	☐	20000.00	19928.51	956159.59	2.1198	P	0.9	-0.4
7	☐	100.000						

y = 1.0619E-004 * x + 0.0035
R = 1.0000
DL = 10.63 ppb
BEC = 33.04 ppb

Weight: <None>
Min Conc: <None>

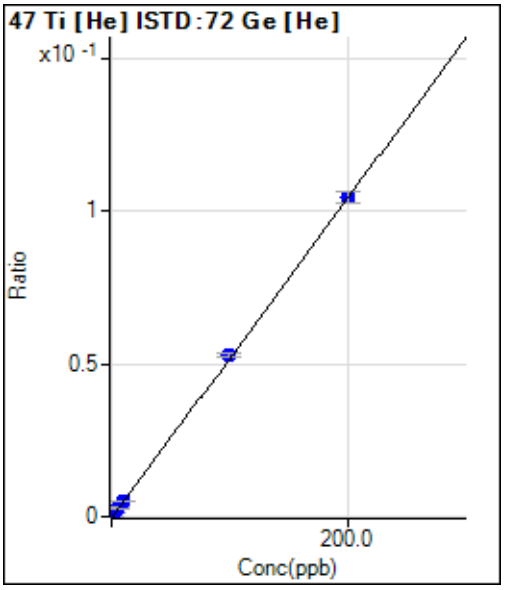
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	19.	
2	☐	2.000	2.036	1963.50	0.0018	P	4.0	1.8
3	☐	5.000	5.016	4650.80	0.0042	P	3.5	0.3
4	☐	10.000	10.133	9379.75	0.0083	P	7.0	1.3
5	☐	100.000	101.296	95898.66	0.0821	P	1.2	1.3
6	☐	200.000	199.345	192295.87	0.1614	P	1.6	-0.3
7	☐	1.000						

y = 8.0892E-004 * x + 1.1421E-004
R = 1.0000
DL = 0.08289 ppb
BEC = 0.1412 ppb

Weight: <None>
Min Conc: <None>

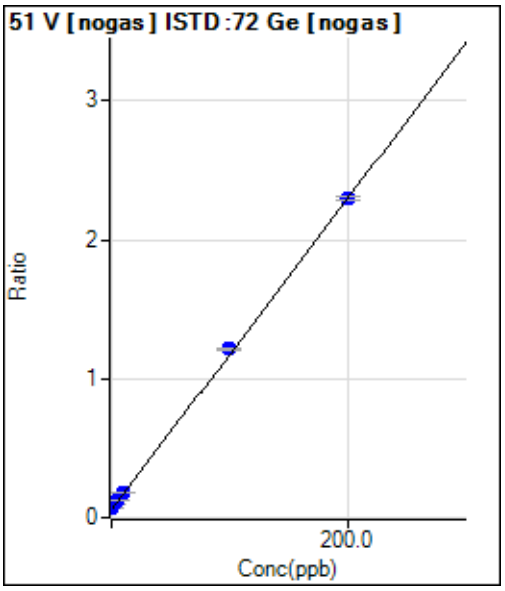


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	45.	
2	☐	2.000	2.277	523.35	0.0012	P	11.	13.8
3	☐	5.000	5.120	1173.40	0.0027	P	17.	2.4
4	☐	10.000	9.704	2243.54	0.0051	P	5.1	-3.0
5	☐	100.000	101.058	23572.01	0.0530	P	2.5	1.1
6	☐	200.000	199.480	47173.49	0.1046	P	3.7	-0.3
7	☐	1.000						

y = 5.2416E-004 * x + 3.1659E-005
R = 1.0000
DL = 0.08243 ppb
BEC = 0.0604 ppb

Weight: <None>
Min Conc: <None>

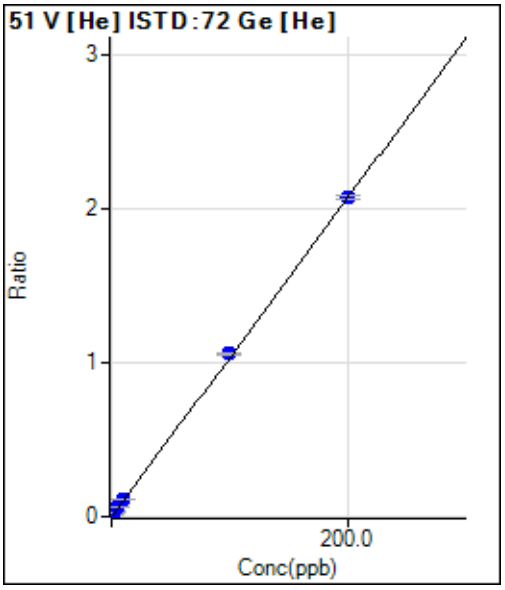
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78972.34	0.0713	P	1.8	
2	☐	2.000	2.197	106781.37	0.0958	P	0.7	9.9
3	☐	5.000	5.176	144003.23	0.1292	P	1.3	3.5
4	☐	10.000	10.125	208422.28	0.1846	P	1.6	1.3
5	☐	100.000	101.977	1417001.33	1.2124	P	1.9	2.0
6	☐	200.000	198.999	2739078.40	2.2981	P	0.9	-0.5
7	☐	1.000						

y = 0.0112 * x + 0.0713
R = 0.9999
DL = 0.3381 ppb
BEC = 6.368 ppb

Weight: <None>
Min Conc: <None>

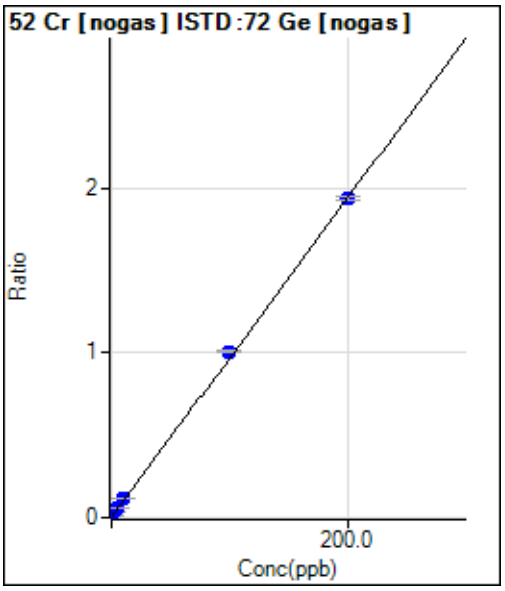


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3618.24	0.0085	P	5.9	
2	☐	2.000	2.174	13295.87	0.0311	P	1.1	8.7
3	☐	5.000	5.032	26270.58	0.0608	P	2.7	0.6
4	☐	10.000	10.012	49275.33	0.1124	P	0.5	0.1
5	☐	100.000	101.444	471885.57	1.0612	P	1.0	1.4
6	☐	200.000	199.275	936612.53	2.0764	P	1.1	-0.4
7	☐	1.000						

y = 0.0104 * x + 0.0085
R = 1.0000
DL = 0.1456 ppb
BEC = 0.8234 ppb

Weight: <None>
Min Conc: <None>

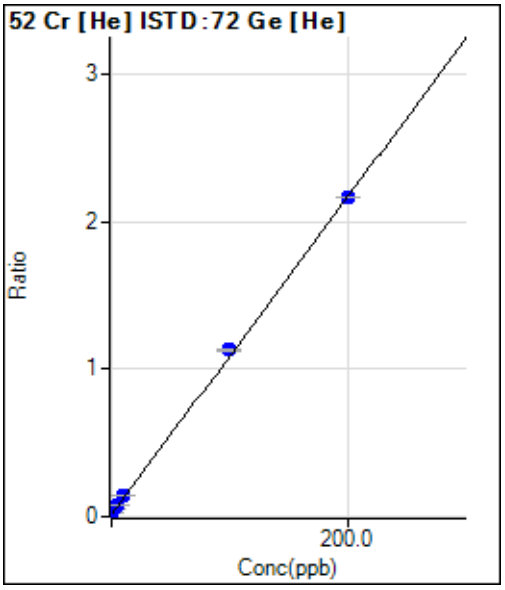
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13573.01	0.0122	P	2.9	
2	☐	2.000	2.116	36531.19	0.0328	P	1.4	5.8
3	☐	5.000	5.138	69268.40	0.0621	P	0.6	2.8
4	☐	10.000	10.489	128861.83	0.1141	P	1.1	4.9
5	☐	100.000	102.655	1179255.50	1.0090	P	1.6	2.7
6	☐	200.000	198.643	2313586.58	1.9410	P	0.6	-0.7
7	☐	1.000						

y = 0.0097 * x + 0.0122
R = 0.9999
DL = 0.1093 ppb
BEC = 1.262 ppb

Weight: <None>
Min Conc: <None>

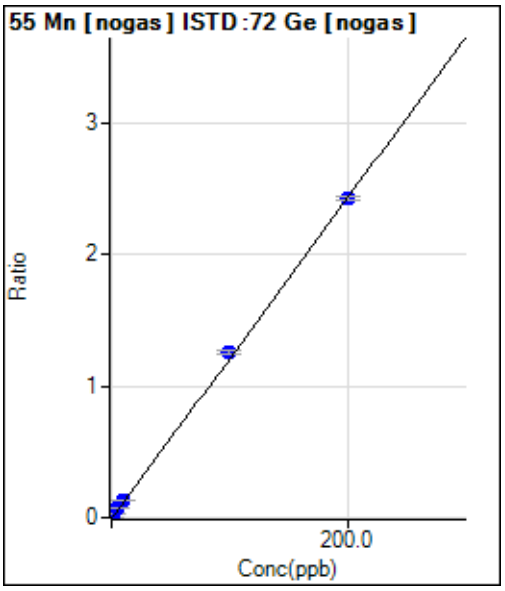


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11160.99	0.0264	P	9.3	
2	☐	2.000	2.213	21468.94	0.0502	P	1.2	10.7
3	☐	5.000	5.200	35635.62	0.0824	P	3.5	4.0
4	☐	10.000	10.445	60899.46	0.1390	P	0.4	4.5
5	☐	100.000	102.463	502763.47	1.1307	P	1.8	2.5
6	☐	200.000	198.739	978118.79	2.1684	P	0.6	-0.6
7	☐	1.000						

y = 0.0108 * x + 0.0264
R = 0.9999
DL = 0.6864 ppb
BEC = 2.447 ppb

Weight: <None>
Min Conc: <None>

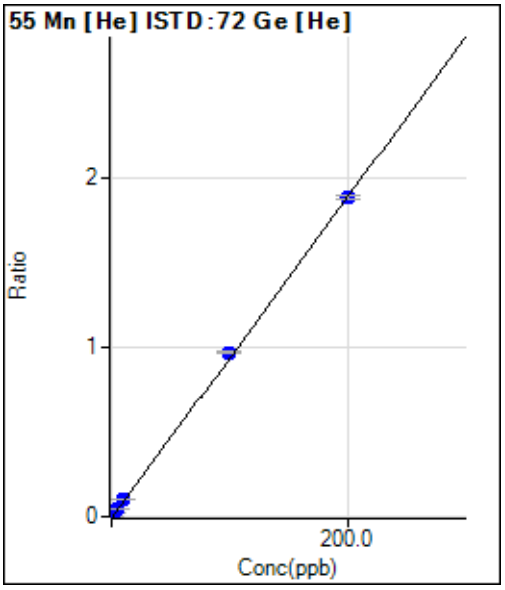
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3070.37	0.0028	P	12.	
2	☐	2.000	2.177	32662.33	0.0293	P	3.1	8.8
3	☐	5.000	5.264	74624.08	0.0669	P	1.0	5.3
4	☐	10.000	10.438	146849.66	0.1300	P	0.7	4.4
5	☐	100.000	102.791	1467711.80	1.2558	P	1.4	2.8
6	☐	200.000	198.574	2888432.04	2.4235	P	1.2	-0.7
7	☐	1.000						

y = 0.0122 * x + 0.0028
R = 0.9999
DL = 0.08458 ppb
BEC = 0.2275 ppb

Weight: <None>
Min Conc: <None>

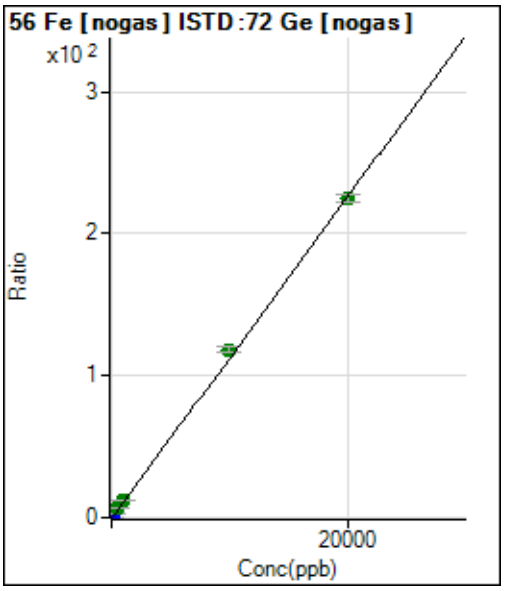


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	450.02	0.0011	P	16.	
2	☐	2.000	2.209	9403.09	0.0220	P	4.9	10.4
3	☐	5.000	5.061	21201.76	0.0490	P	2.0	1.2
4	☐	10.000	10.288	43205.32	0.0986	P	1.8	2.9
5	☐	100.000	102.311	431736.67	0.9710	P	1.1	2.3
6	☐	200.000	198.827	850664.52	1.8859	P	1.1	-0.6
7	☐	1.000						

y = 0.0095 * x + 0.0011
R = 0.9999
DL = 0.05644 ppb
BEC = 0.1121 ppb

Weight: <None>
Min Conc: <None>

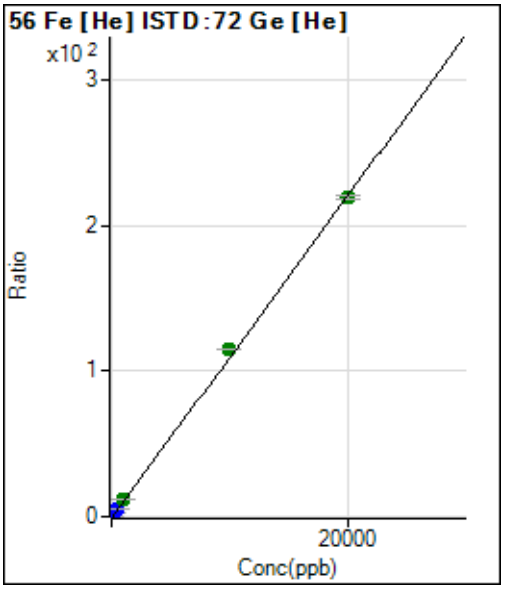
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	386700.38	0.3489	P	0.7	
2	☐	200.000	199.504	2910056.00	2.6121	P	0.8	-0.2
3	☐	500.000	551.432	7361525.72	6.6044	A	0.8	10.3
4	☐	1000.000	1087.830	14329703.54	12.6893	A	1.8	8.8
5	☐	10000.00	10409.75	138355031.2	118.438	A	3.0	4.1
6	☐	20000.00	19789.44	267863742.6	224.841	A	2.7	-1.1
7	☐	100.000						

y = 0.0113 * x + 0.3489
R = 0.9997
DL = 0.608 ppb
BEC = 30.76 ppb

Weight: <None>
Min Conc: <None>

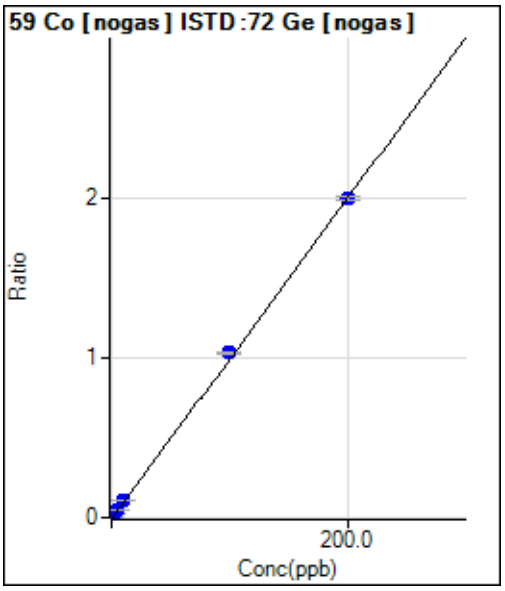


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14387.40	0.0339	P	4.3	
2	☐	200.000	202.105	973273.58	2.2771	P	1.1	1.1
3	☐	500.000	470.666	2273331.63	5.2578	P	0.1	-5.9
4	☐	1000.000	1096.116	5346251.59	12.1995	A	1.3	9.6
5	☐	10000.00	10385.13	51270620.90	115.296	A	0.4	3.9
6	☐	20000.00	19803.34	99159648.52	219.826	A	0.8	-1.0
7	☐	100.000						

y = 0.0111 * x + 0.0339
R = 0.9997
DL = 0.3956 ppb
BEC = 3.058 ppb

Weight: <None>
Min Conc: <None>

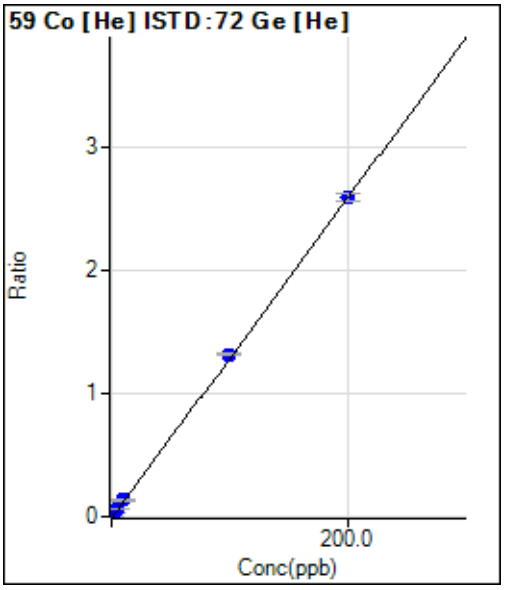
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	93.33	0.0001	P	25.	
2	☐	2.000	2.227	25047.77	0.0225	P	1.4	11.4
3	☐	5.000	5.255	58998.93	0.0529	P	1.8	5.1
4	☐	10.000	10.439	118672.09	0.1051	P	2.2	4.4
5	☐	100.000	102.441	1204303.65	1.0303	P	1.1	2.4
6	☐	200.000	198.749	2382329.91	1.9988	P	1.1	-0.6
7	☐	1.000						

y = 0.0101 * x + 8.4283E-005
R = 0.9999
DL = 0.00636 ppb
BEC = 0.008381 ppb

Weight: <None>
Min Conc: <None>

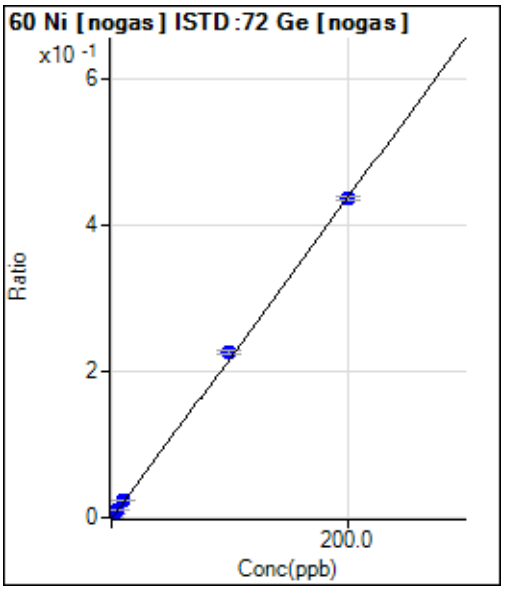


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	35.	
2	☐	2.000	2.186	12161.80	0.0285	P	3.7	9.3
3	☐	5.000	5.226	29369.04	0.0679	P	1.3	4.5
4	☐	10.000	10.272	58470.38	0.1334	P	1.8	2.7
5	☐	100.000	101.240	584500.66	1.3144	P	0.7	1.2
6	☐	200.000	199.359	1167430.48	2.5882	P	1.9	-0.3
7	☐	1.000						

y = 0.0130 * x + 7.1075E-005
R = 1.0000
DL = 0.005753 ppb
BEC = 0.005475 ppb

Weight: <None>
Min Conc: <None>

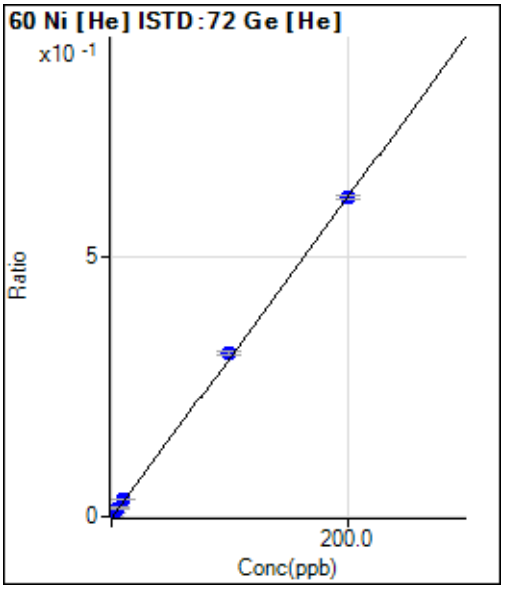
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	370.01	0.0003	P	18.	
2	☐	2.000	2.370	6181.37	0.0055	P	0.6	18.5
3	☐	5.000	4.966	12555.44	0.0113	P	3.8	-0.7
4	☐	10.000	10.776	27164.95	0.0240	P	2.8	7.8
5	☐	100.000	102.877	264931.41	0.2267	P	1.8	2.9
6	☐	200.000	198.520	521021.11	0.4371	P	0.9	-0.7
7	☐	1.000						

y = 0.0022 * x + 3.3440E-004
R = 0.9999
DL = 0.08619 ppb
BEC = 0.152 ppb

Weight: <None>
Min Conc: <None>

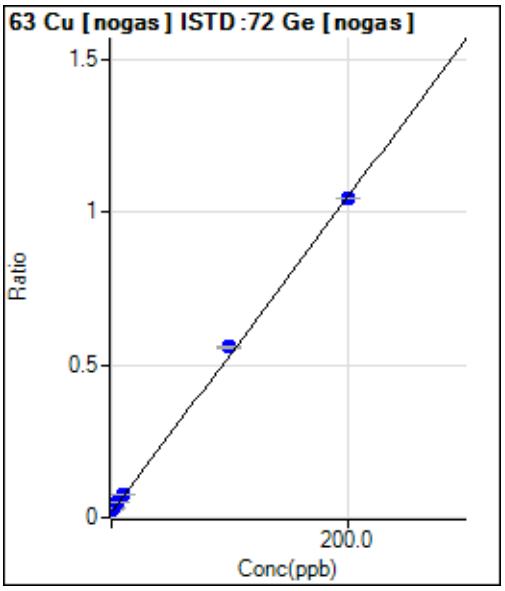


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96.67	0.0002	P	51.	
2	☐	2.000	2.379	3247.08	0.0076	P	2.8	19.0
3	☐	5.000	5.268	7155.19	0.0165	P	3.2	5.4
4	☐	10.000	10.534	14400.39	0.0329	P	2.7	5.3
5	☐	100.000	102.183	140857.90	0.3168	P	2.0	2.2
6	☐	200.000	198.871	278009.68	0.6163	P	1.0	-0.6
7	☐	1.000						

y = 0.0031 * x + 2.2714E-004
R = 0.9999
DL = 0.1126 ppb
BEC = 0.07332 ppb

Weight: <None>
Min Conc: <None>

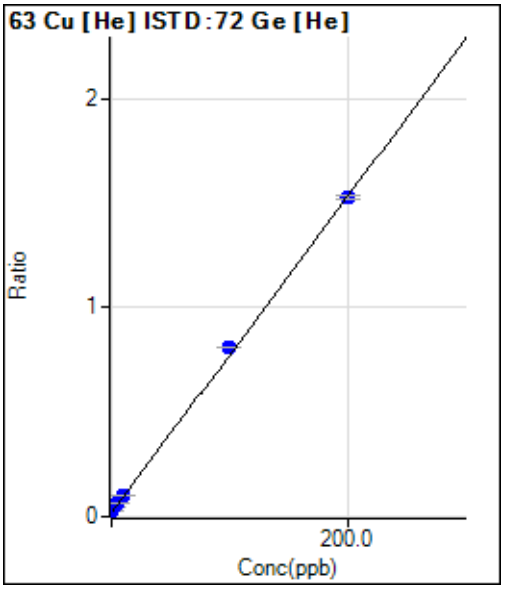
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	24630.55	0.0222	P	0.9	
2	☐	2.000	2.112	36929.11	0.0331	P	1.6	5.6
3	☐	5.000	4.982	53485.28	0.0480	P	0.9	-0.4
4	☐	10.000	10.096	84051.06	0.0744	P	1.2	1.0
5	☐	100.000	103.727	653014.90	0.5585	P	1.6	3.7
6	☐	200.000	198.131	1247733.94	1.0466	P	0.5	-0.9
7	☐	1.000						

y = 0.0052 * x + 0.0222
R = 0.9998
DL = 0.1165 ppb
BEC = 4.298 ppb

Weight: <None>
Min Conc: <None>

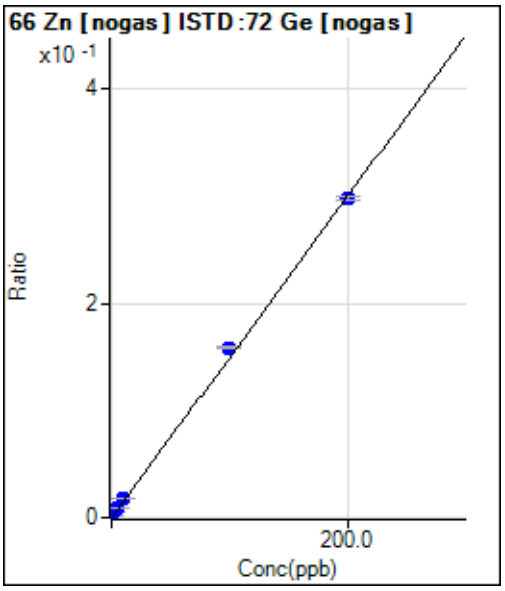


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11431.20	0.0270	P	1.8	
2	☐	2.000	2.268	18872.18	0.0442	P	4.1	13.4
3	☐	5.000	4.963	27919.53	0.0646	P	1.2	-0.7
4	☐	10.000	9.853	44532.91	0.1016	P	0.8	-1.5
5	☐	100.000	103.226	359687.52	0.8089	P	0.6	3.2
6	☐	200.000	198.393	690033.95	1.5298	P	1.4	-0.8
7	☐	1.000						

y = 0.0076 * x + 0.0270
R = 0.9998
DL = 0.1939 ppb
BEC = 3.562 ppb

Weight: <None>
Min Conc: <None>

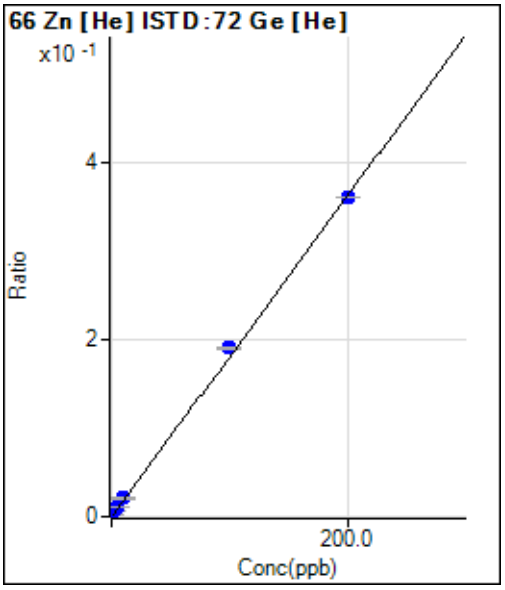
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1273.41	0.0012	P	12.	
2	☐	2.000	2.690	5787.87	0.0052	P	5.2	34.5
3	☐	5.000	5.461	10440.47	0.0094	P	4.4	9.2
4	☐	10.000	10.736	19536.32	0.0173	P	1.2	7.4
5	☐	100.000	104.770	185592.69	0.1587	P	0.5	4.8
6	☐	200.000	197.560	355713.59	0.2983	P	1.4	-1.2
7	☐	1.000						

y = 0.0015 * x + 0.0012
R = 0.9996
DL = 0.2809 ppb
BEC = 0.7648 ppb

Weight: <None>
Min Conc: <None>

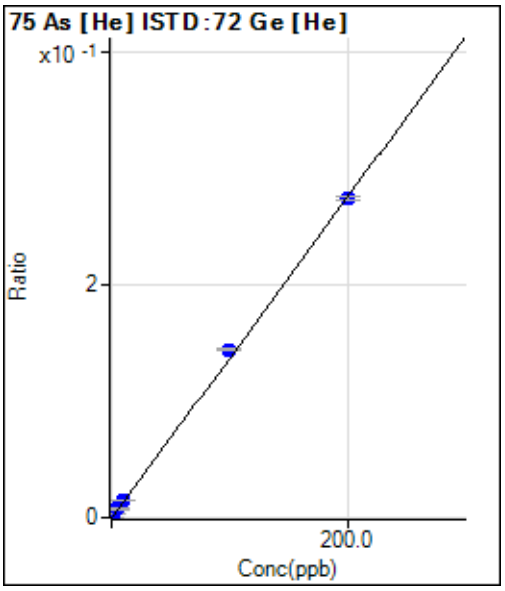


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	633.36	0.0015	P	16.	
2	☐	2.000	2.659	2700.29	0.0063	P	8.7	33.0
3	☐	5.000	5.344	4834.20	0.0112	P	4.2	6.9
4	☐	10.000	10.666	9126.27	0.0208	P	6.4	6.7
5	☐	100.000	104.208	84638.58	0.1903	P	1.0	4.2
6	☐	200.000	197.847	162399.48	0.3600	P	0.6	-1.1
7	☐	1.000						

y = 0.0018 * x + 0.0015
R = 0.9997
DL = 0.4176 ppb
BEC = 0.8259 ppb

Weight: <None>
Min Conc: <None>

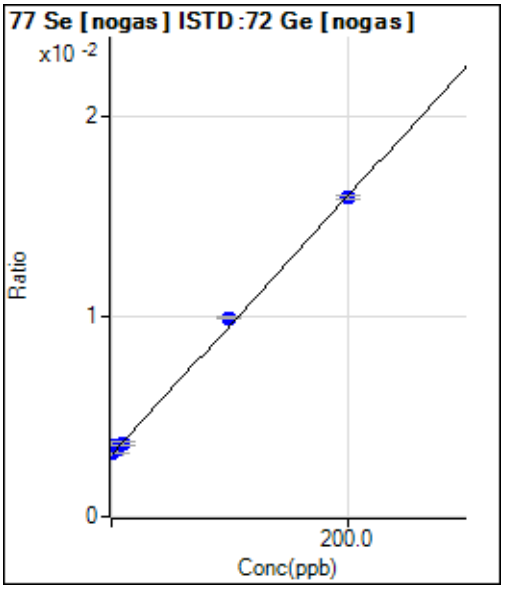
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	264.45	0.0006	P	10.	
2	☐	2.000	1.973	1430.08	0.0033	P	0.6	-1.4
3	☐	5.000	4.998	3251.48	0.0075	P	2.6	0.0
4	☐	10.000	9.890	6253.57	0.0143	P	3.1	-1.1
5	☐	100.000	103.867	64005.64	0.1439	P	1.1	3.9
6	☐	200.000	198.072	123562.35	0.2739	P	1.2	-1.0
7	☐	1.000						

y = 0.0014 * x + 6.2393E-004
R = 0.9997
DL = 0.148 ppb
BEC = 0.4522 ppb

Weight: <None>
Min Conc: <None>

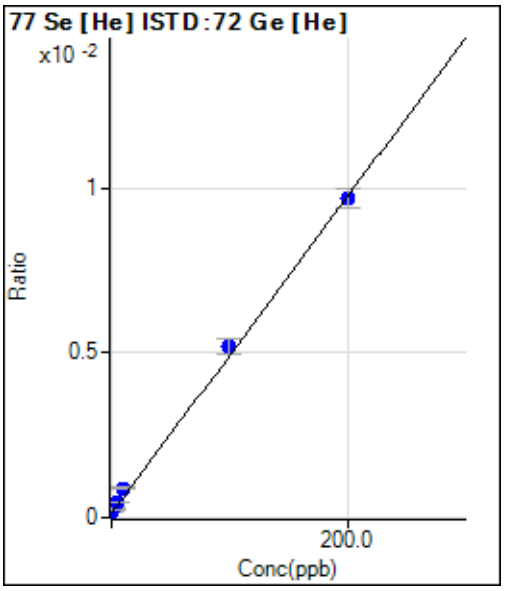


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3533.82	0.0032	P	5.5	
2	☐	2.000	5.861	3977.27	0.0036	P	5.1	193.
3	☐	5.000	2.363	3727.19	0.0033	P	10.	-52.7
4	☐	10.000	7.233	4130.64	0.0037	P	3.2	-27.7
5	☐	100.000	104.581	11624.75	0.0099	P	1.1	4.6
6	☐	200.000	197.875	19035.77	0.0160	P	1.5	-1.1
7	☐	1.000						

y = 6.4570E-005 * x + 0.0032
R = 0.9992
DL = 8.17 ppb
BEC = 49.39 ppb

Weight: <None>
Min Conc: <None>

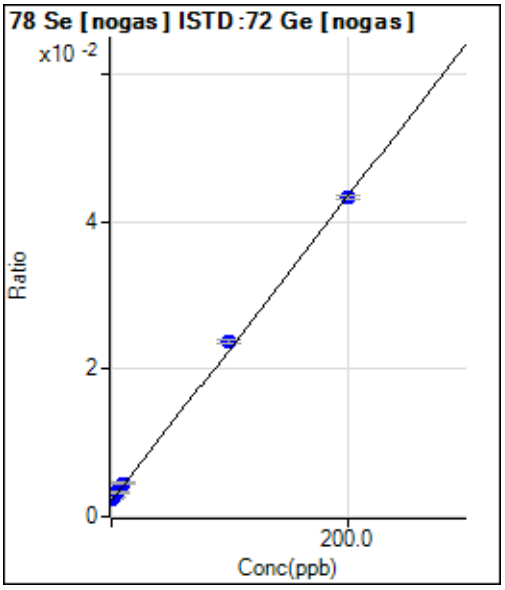
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73.33	0.0002	P	28.	
2	☐	2.000	2.236	120.00	0.0003	P	14.	11.8
3	☐	5.000	5.853	196.67	0.0005	P	2.8	17.1
4	☐	10.000	14.897	390.01	0.0009	P	5.0	49.0
5	☐	100.000	104.153	2306.88	0.0052	P	9.6	4.2
6	☐	200.000	197.655	4367.41	0.0097	P	5.9	-1.2
7	☐	1.000						

y = 4.8119E-005 * x + 1.7323E-004
R = 0.9995
DL = 3.074 ppb
BEC = 3.6 ppb

Weight: <None>
Min Conc: <None>

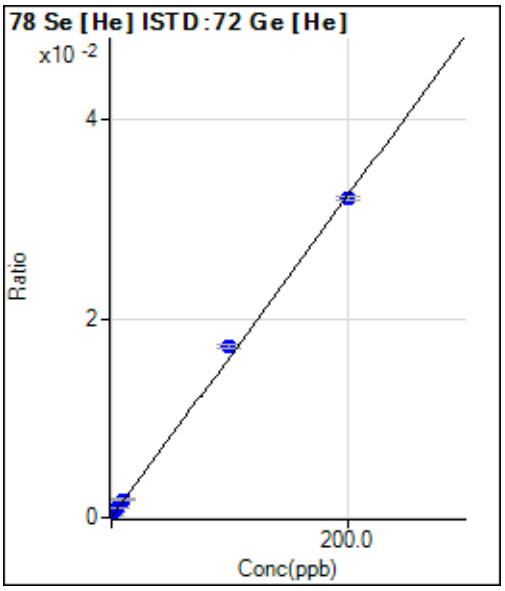


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2603.60	0.0023	P	8.5	
2	☐	2.000	1.649	2997.03	0.0027	P	1.9	-17.6
3	☐	5.000	4.967	3760.55	0.0034	P	7.3	-0.7
4	☐	10.000	10.676	5144.31	0.0046	P	7.9	6.8
5	☐	100.000	103.113	27626.06	0.0236	P	2.1	3.1
6	☐	200.000	198.414	51636.86	0.0433	P	0.9	-0.8
7	☐	1.000						

y = 2.0652E-004 * x + 0.0023
R = 0.9998
DL = 2.904 ppb
BEC = 11.37 ppb

Weight: <None>
Min Conc: <None>

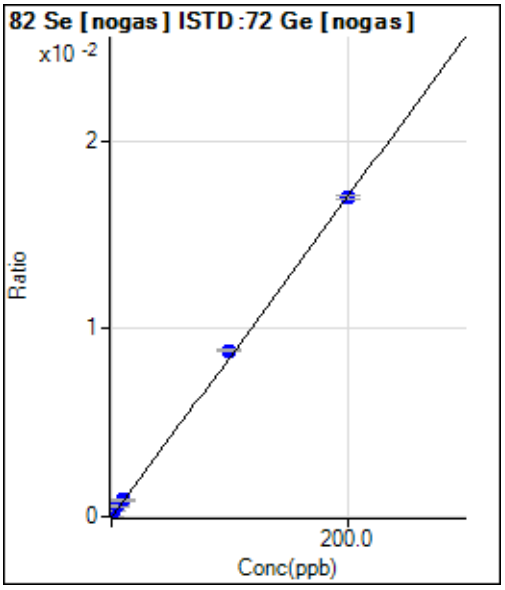
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.33	0.0002	P	10.	
2	☐	2.000	2.075	225.33	0.0005	P	3.1	3.8
3	☐	5.000	4.623	406.01	0.0009	P	6.7	-7.5
4	☐	10.000	10.111	800.02	0.0018	P	7.2	1.1
5	☐	100.000	105.353	7655.32	0.0172	P	1.4	5.4
6	☐	200.000	197.327	14469.04	0.0321	P	1.3	-1.3
7	☐	1.000						

y = 1.6159E-004 * x + 1.9180E-004
R = 0.9995
DL = 0.3604 ppb
BEC = 1.187 ppb

Weight: <None>
Min Conc: <None>

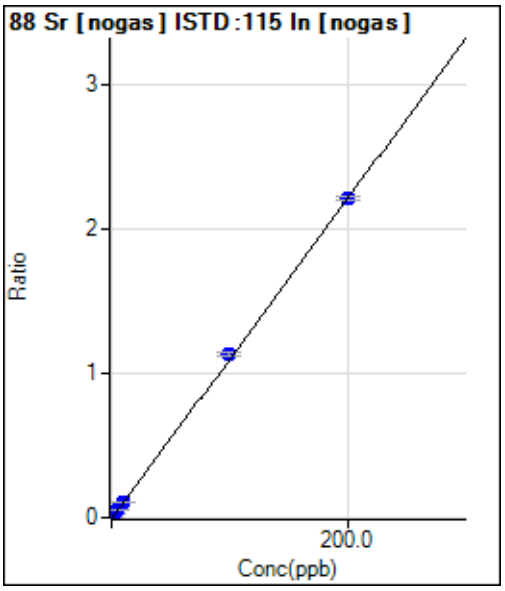


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	25.	
2	☐	2.000	3.079	340.01	0.0003	P	5.1	54.0
3	☐	5.000	6.224	640.03	0.0006	P	20.	24.5
4	☐	10.000	9.972	1010.06	0.0009	P	7.9	-0.3
5	☐	100.000	102.871	10320.40	0.0088	P	1.2	2.9
6	☐	200.000	198.524	20264.12	0.0170	P	1.1	-0.7
7	☐	1.000						

y = 8.5432E-005 * x + 4.2141E-005
R = 0.9999
DL = 0.3743 ppb
BEC = 0.4933 ppb

Weight: <None>
Min Conc: <None>

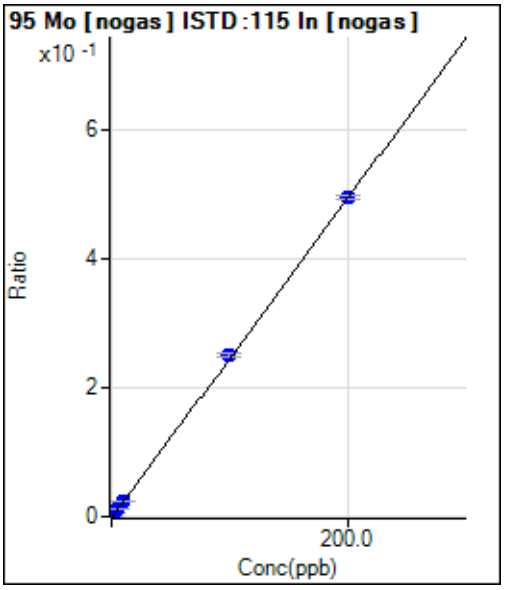
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	303.34	0.0003	P	17.	
2	☐	2.000	2.113	28801.66	0.0238	P	4.0	5.6
3	☐	5.000	5.021	67621.76	0.0562	P	3.6	0.4
4	☐	10.000	9.999	137698.60	0.1116	P	1.6	0.0
5	☐	100.000	101.989	1426060.92	1.1361	P	1.9	2.0
6	☐	200.000	199.004	2825632.87	2.2166	P	0.9	-0.5
7	☐	1.000						

y = 0.0111 * x + 2.5409E-004
R = 0.9999
DL = 0.01161 ppb
BEC = 0.02281 ppb

Weight: <None>
Min Conc: <None>

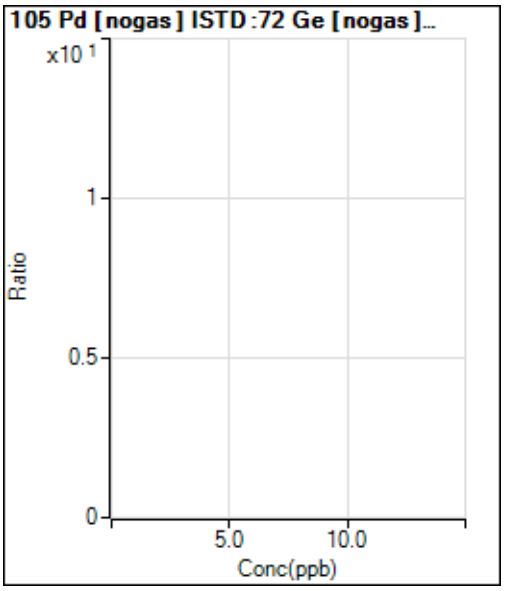


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	51.	
2	☐	2.000	2.064	6334.81	0.0052	P	4.1	3.2
3	☐	5.000	5.025	15124.75	0.0126	P	0.7	0.5
4	☐	10.000	9.936	30518.77	0.0247	P	4.3	-0.6
5	☐	100.000	101.002	314268.15	0.2504	P	2.1	1.0
6	☐	200.000	199.501	630208.86	0.4944	P	0.7	-0.2
7	☐	1.000						

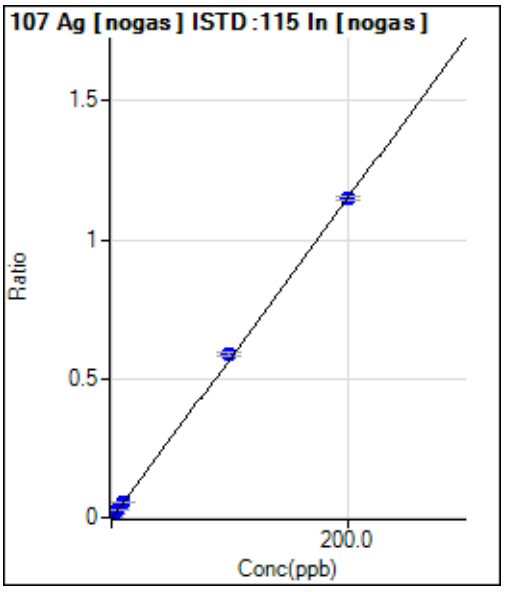
y = 0.0025 * x + 1.1739E-004
R = 1.0000
DL = 0.07375 ppb
BEC = 0.04738 ppb

Weight: <None>
Min Conc: <None>

Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

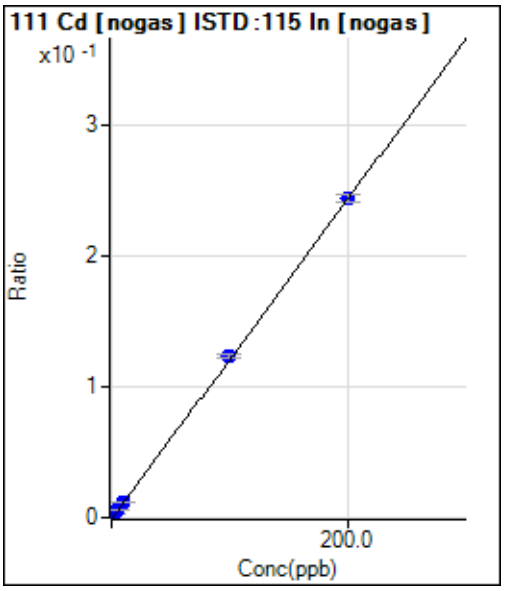


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0001	P	37.	
2	☐	2.000	2.125	14937.94	0.0123	P	7.1	6.3
3	☐	5.000	5.148	35874.44	0.0298	P	2.5	3.0
4	☐	10.000	10.060	71776.50	0.0582	P	1.2	0.6
5	☐	100.000	102.156	740983.63	0.5903	P	2.4	2.2
6	☐	200.000	198.914	1465182.22	1.1493	P	1.6	-0.5
7	☐	1.000						

y = 0.0058 * x + 5.8577E-005
R = 0.9999
DL = 0.01138 ppb
BEC = 0.01014 ppb

Weight: <None>
Min Conc: <None>

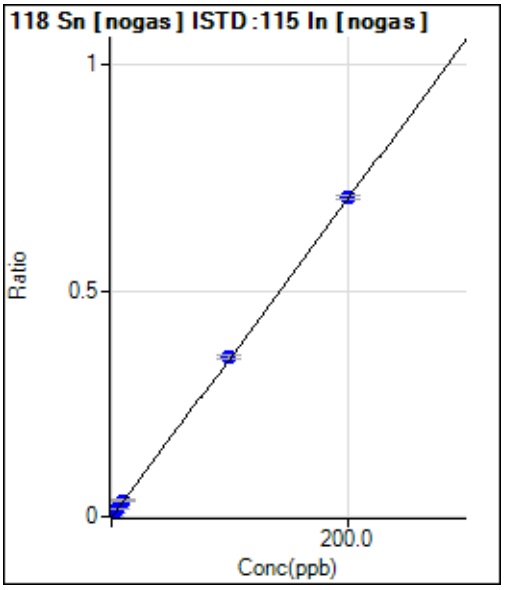
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.171	3210.43	0.0027	P	14.	8.5
3	☐	5.000	5.113	7518.75	0.0062	P	4.3	2.3
4	☐	10.000	9.731	14664.26	0.0119	P	3.2	-2.7
5	☐	100.000	101.033	154920.20	0.1234	P	3.1	1.0
6	☐	200.000	199.492	310679.99	0.2437	P	2.3	-0.3
7	☐	1.000						

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

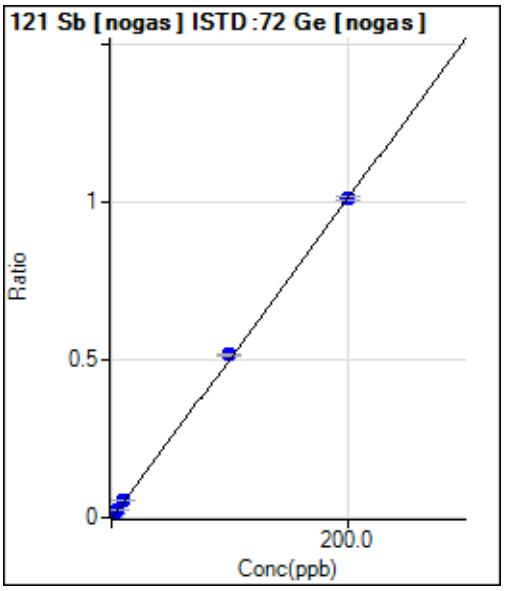


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1900.16	0.0016	P	5.8	
2	☐	2.000	2.028	10587.39	0.0087	P	2.2	1.4
3	☐	5.000	4.868	22571.23	0.0188	P	2.0	-2.6
4	☐	10.000	9.735	44298.20	0.0359	P	2.1	-2.6
5	☐	100.000	99.840	443819.49	0.3535	P	3.3	-0.2
6	☐	200.000	200.096	901184.36	0.7069	P	1.2	0.0
7	☐	1.000						

y = 0.0035 * x + 0.0016
R = 1.0000
DL = 0.07896 ppb
BEC = 0.4515 ppb

Weight: <None>
Min Conc: <None>

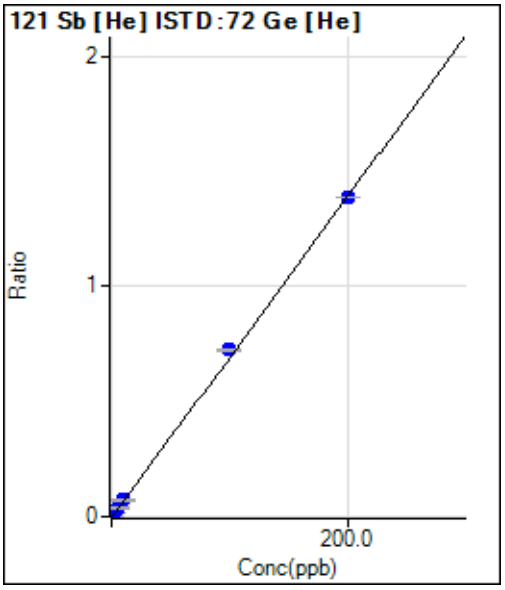
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1243.41	0.0011	P	12.	
2	☐	2.000	2.202	13686.70	0.0123	P	2.4	10.1
3	☐	5.000	5.117	30155.10	0.0271	P	1.2	2.3
4	☐	10.000	10.269	60065.39	0.0532	P	2.3	2.7
5	☐	100.000	101.670	603649.60	0.5164	P	1.1	1.7
6	☐	200.000	199.146	1204321.39	1.0104	P	1.1	-0.4
7	☐	1.000						

y = 0.0051 * x + 0.0011
R = 1.0000
DL = 0.08544 ppb
BEC = 0.2216 ppb

Weight: <None>
Min Conc: <None>

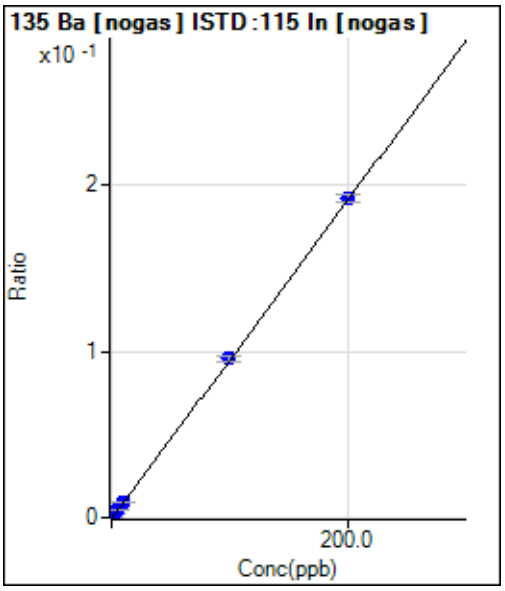


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	643.36	0.0015	P	16.	
2	☐	2.000	2.242	7345.32	0.0172	P	1.9	12.1
3	☐	5.000	5.137	16175.98	0.0374	P	3.2	2.7
4	☐	10.000	9.976	31214.03	0.0712	P	1.1	-0.2
5	☐	100.000	103.364	321811.23	0.7237	P	1.6	3.4
6	☐	200.000	198.313	625702.96	1.3871	P	0.6	-0.8
7	☐	1.000						

y = 0.0070 * x + 0.0015
R = 0.9998
DL = 0.1091 ppb
BEC = 0.2178 ppb

Weight: <None>
Min Conc: <None>

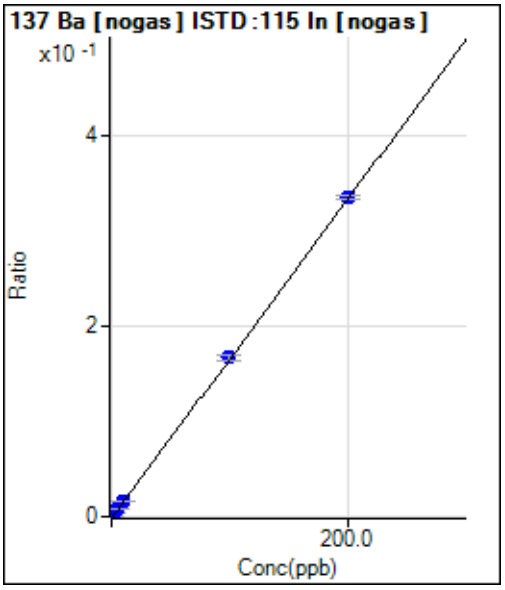
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	50.00	0.0000	P	34.	
2	☐	2.000	1.976	2343.57	0.0019	P	9.6	-1.2
3	☐	5.000	4.970	5784.61	0.0048	P	1.7	-0.6
4	☐	10.000	9.784	11621.55	0.0094	P	1.2	-2.2
5	☐	100.000	99.627	119933.93	0.0955	P	3.0	-0.4
6	☐	200.000	200.198	244693.95	0.1919	P	1.9	0.1
7	☐	1.000						

y = 9.5854E-004 * x + 4.1873E-005
R = 1.0000
DL = 0.04532 ppb
BEC = 0.04368 ppb

Weight: <None>
Min Conc: <None>

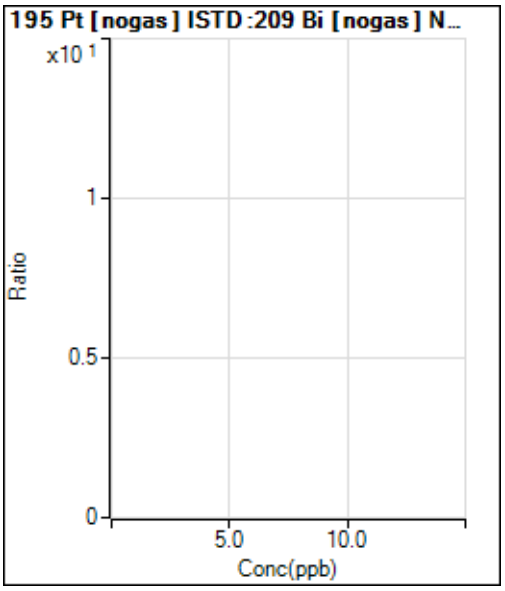


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73.33	0.0001	P	15.	
2	☐	2.000	2.054	4247.39	0.0035	P	10.	2.7
3	☐	5.000	5.106	10387.34	0.0086	P	1.6	2.1
4	☐	10.000	9.848	20465.04	0.0166	P	2.0	-1.5
5	☐	100.000	99.609	209927.02	0.1672	P	3.5	-0.4
6	☐	200.000	200.200	428396.77	0.3360	P	1.7	0.1
7	☐	1.000						

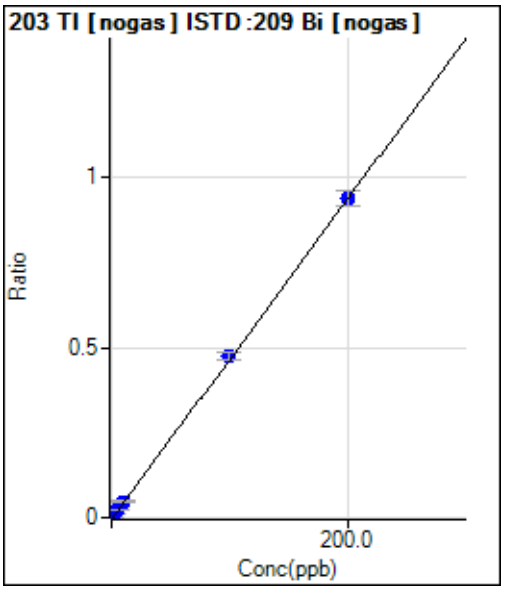
y = 0.0017 * x + 6.1397E-005
R = 1.0000
DL = 0.01692 ppb
BEC = 0.03659 ppb

Weight: <None>
Min Conc: <None>

Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

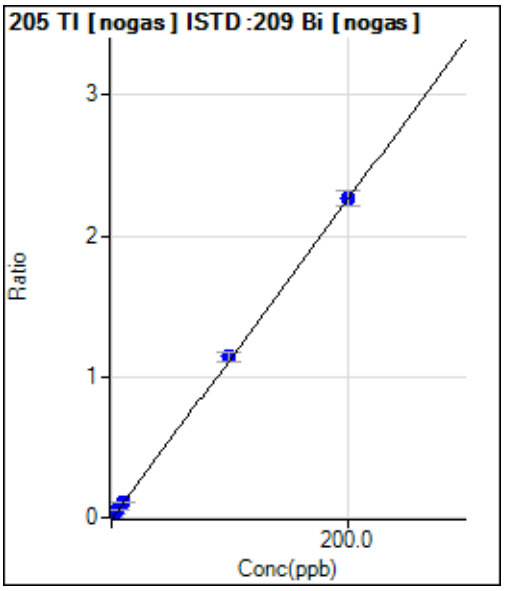


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	58.	
2	☐	2.000	2.065	10994.60	0.0098	P	5.2	3.3
3	☐	5.000	4.988	26602.96	0.0235	P	7.4	-0.2
4	☐	10.000	9.955	53829.52	0.0469	P	5.6	-0.4
5	☐	100.000	101.379	563069.87	0.4779	P	4.6	1.4
6	☐	200.000	199.312	1120761.08	0.9395	P	4.8	-0.3
7	☐	1.000						

y = 0.0047 * x + 2.4030E-005
R = 1.0000
DL = 0.008877 ppb
BEC = 0.005098 ppb

Weight: <None>
Min Conc: <None>

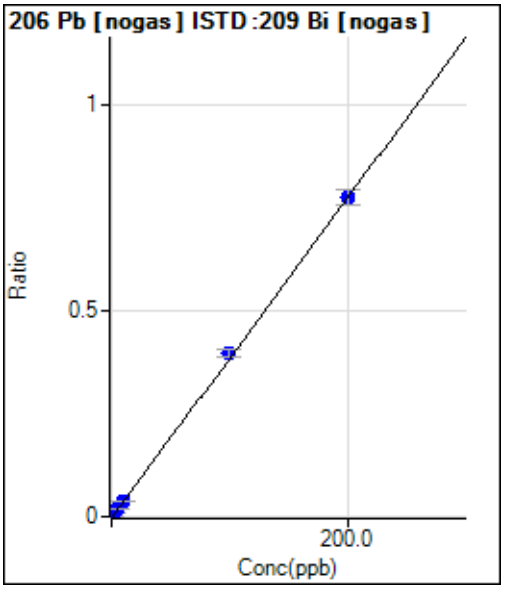
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0001	P	36.	
2	☐	2.000	2.086	26773.17	0.0238	P	6.8	4.3
3	☐	5.000	4.862	62530.28	0.0553	P	5.5	-2.8
4	☐	10.000	9.890	128813.08	0.1124	P	5.2	-1.1
5	☐	100.000	100.681	1346600.16	1.1429	P	5.7	0.7
6	☐	200.000	199.668	2703665.43	2.2664	P	5.3	-0.2
7	☐	1.000						

y = 0.0114 * x + 9.4040E-005
R = 1.0000
DL = 0.009104 ppb
BEC = 0.008285 ppb

Weight: <None>
Min Conc: <None>

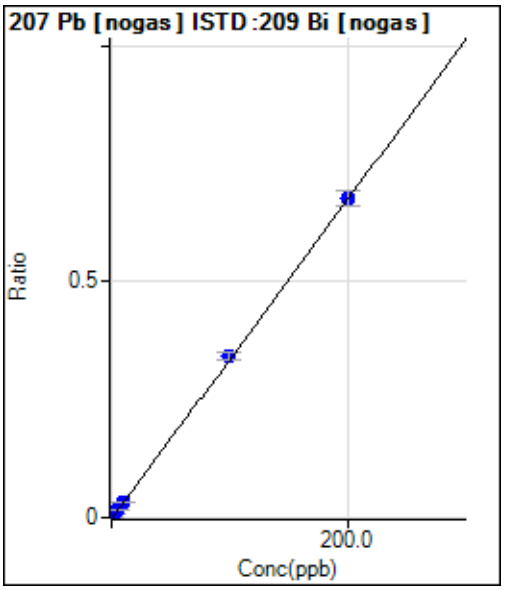


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0002	P	10.	
2	☐	2.000	2.081	9356.70	0.0083	P	8.7	4.1
3	☐	5.000	4.916	21881.21	0.0194	P	7.2	-1.7
4	☐	10.000	9.675	43466.23	0.0379	P	4.3	-3.3
5	☐	100.000	101.696	467133.43	0.3965	P	4.6	1.7
6	☐	200.000	199.170	926021.68	0.7763	P	5.3	-0.4
7	☐	1.000						

y = 0.0039 * x + 2.0209E-004
R = 0.9999
DL = 0.01553 ppb
BEC = 0.05186 ppb

Weight: <None>
Min Conc: <None>

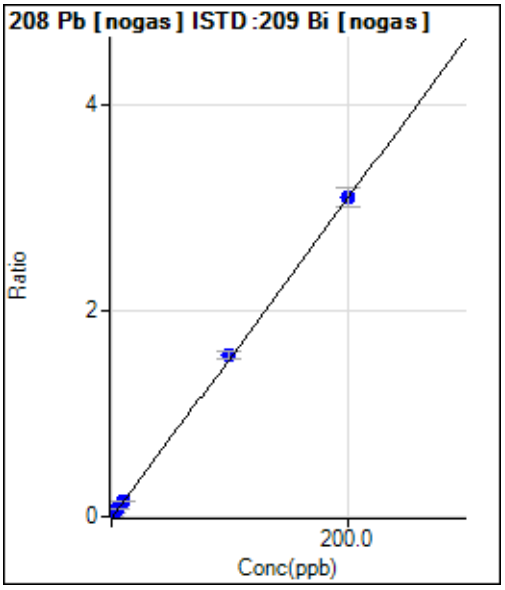
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.67	0.0001	P	13.	
2	☐	2.000	2.052	7962.47	0.0071	P	4.3	2.6
3	☐	5.000	4.793	18502.89	0.0164	P	6.5	-4.1
4	☐	10.000	9.672	37732.46	0.0329	P	5.9	-3.3
5	☐	100.000	100.897	403459.29	0.3424	P	4.3	0.9
6	☐	200.000	199.573	807778.69	0.6771	P	5.2	-0.2
7	☐	1.000						

y = 0.0034 * x + 1.0536E-004
R = 1.0000
DL = 0.01233 ppb
BEC = 0.03106 ppb

Weight: <None>
Min Conc: <None>

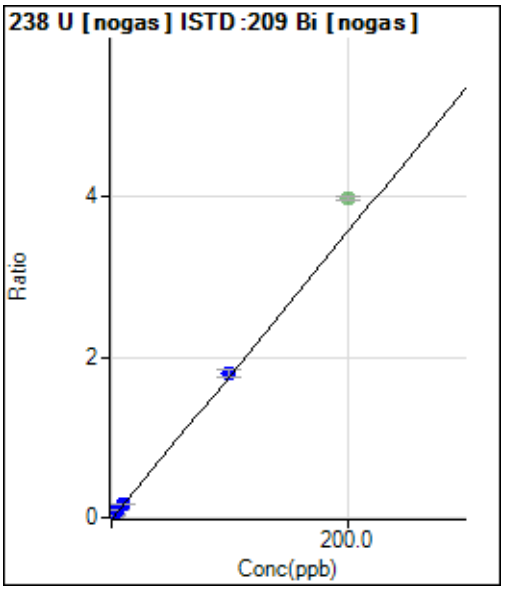


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	770.03	0.0007	P	9.5	
2	☐	2.000	2.069	36960.35	0.0328	P	7.3	3.4
3	☐	5.000	4.924	87271.65	0.0772	P	5.5	-1.5
4	☐	10.000	9.778	174906.59	0.1525	P	5.0	-2.2
5	☐	100.000	100.782	1845100.41	1.5659	P	4.5	0.8
6	☐	200.000	199.621	3699075.70	3.1009	P	5.5	-0.2
7	☐	1.000						

y = 0.0155 * x + 6.9682E-004
R = 1.0000
DL = 0.01281 ppb
BEC = 0.04487 ppb

Weight: <None>
Min Conc: <None>

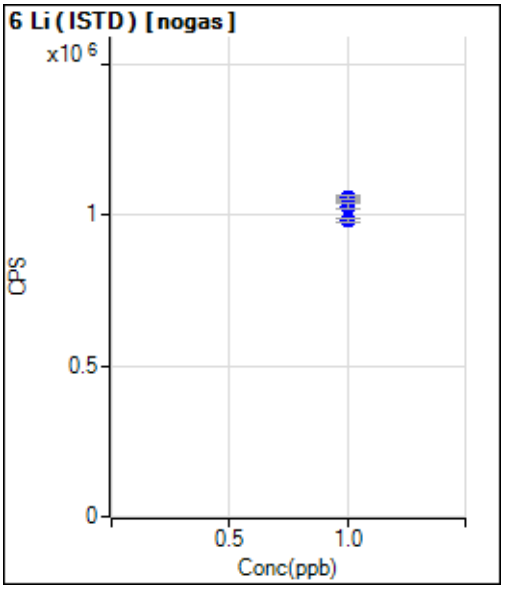
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	33.	
2	☐	2.000	2.010	40645.50	0.0361	P	6.0	0.5
3	☐	5.000	4.838	98161.78	0.0868	P	5.7	-3.2
4	☐	10.000	9.664	198774.95	0.1734	P	5.1	-3.4
5	☐	100.000	100.042	2114238.19	1.7943	P	5.6	0.0
6	☑	200.000		4756195.34	3.9859	A	1.2	
7	☐	1.000						

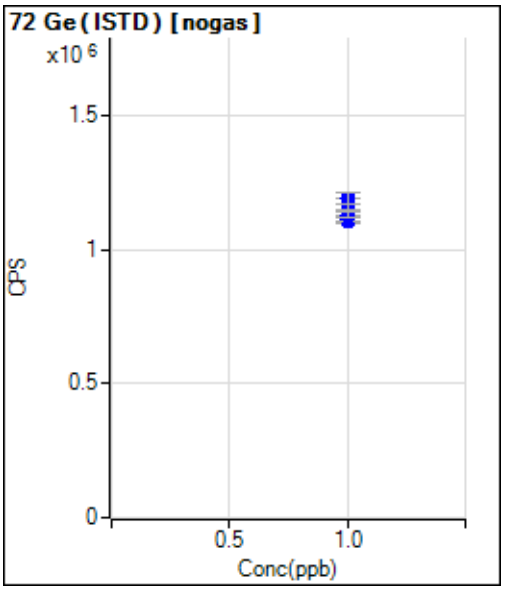
y = 0.0179 * x + 3.3266E-005
R = 1.0000
DL = 0.001876 ppb
BEC = 0.001855 ppb

Weight: <None>
Min Conc: <None>

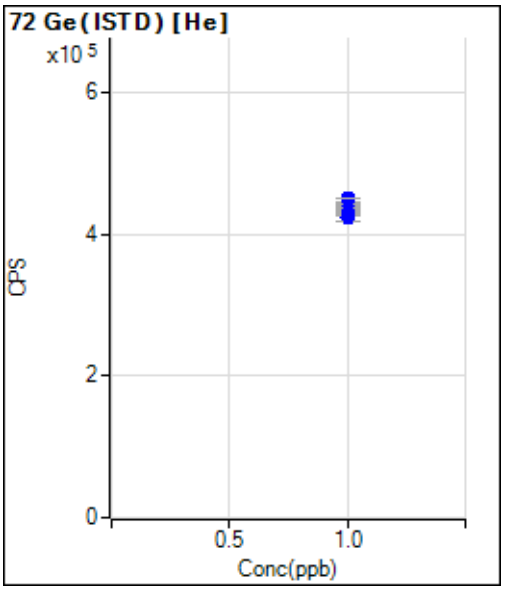


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1052078.48		P	0.9	
2	☐	1.000		1057950.27		P	0.8	
3	☐	1.000		1055529.21		P	0.5	
4	☐	1.000		1056599.40		P	0.9	
5	☐	1.000		1029134.84		P	1.9	
6	☐	1.000		981397.24		P	1.2	
7	☐	1.000						

Calibration for 021_ICV.d

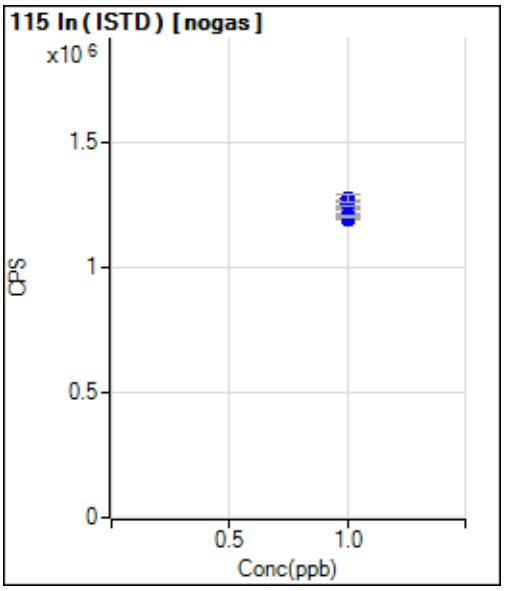


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1108445.09		P	1.7	
2	☐	1.000		1114158.71		P	2.1	
3	☐	1.000		1114670.74		P	1.1	
4	☐	1.000		1129502.56		P	1.8	
5	☐	1.000		1169046.91		P	3.8	
6	☐	1.000		1192115.66		P	3.6	
7	☐	1.000						

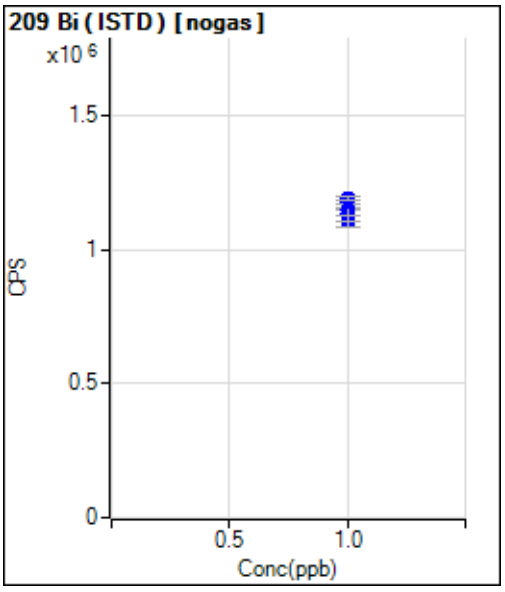


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		423647.24		P	2.0	
2	☐	1.000		427429.09		P	0.6	
3	☐	1.000		432374.03		P	0.5	
4	☐	1.000		438255.49		P	0.6	
5	☐	1.000		444678.73		P	0.8	
6	☐	1.000		451083.14		P	0.6	
7	☐	1.000						

Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1193955.10		P	0.4	
2	☐	1.000		1211017.39		P	0.6	
3	☐	1.000		1203630.55		P	0.6	
4	☐	1.000		1233698.45		P	0.9	
5	☐	1.000		1255094.19		P	1.5	
6	☐	1.000		1274614.41		P	2.0	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1107740.19		P	3.9	
2	☐	1.000		1127973.16		P	3.4	
3	☐	1.000		1132620.97		P	4.0	
4	☐	1.000		1147868.60		P	3.6	
5	☐	1.000		1178555.69		P	1.2	
6	☐	1.000		1193356.24		P	1.0	
7	☐	1.000						

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	014CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:35:41-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	28	95.14
B	11	1	nogas	9870	0.04
Al	27	1	nogas	25922	0.02
P	31	1	nogas	24790	0.01
Ti	47	1	nogas	127	15.69
Ni	60	1	nogas	370	4.79
Cu	63	1	nogas	24631	0.00
Zn	66	1	nogas	1273	0.84
Se	77	1	nogas	3534	0.13
Se	82	1	nogas	47	53.02
Sr	88	1	nogas	303	5.58
Mo	95	1	nogas	140	36.79
Ag	107	1	nogas	70	53.99
Sn	118	1	nogas	1900	0.29
Sb	121	1	nogas	1243	0.93
Ba	137	1	nogas	73	21.47
Tl	205	1	nogas	103	32.89
Pb	208	1	nogas	770	0.77
Li	7	1	nogas	73741	0.00
Na	23	2	He	39006	0.01
Mg	24	2	He	580	0.59
Al	27	2	He	1733	0.33
K	39	2	He	109759	0.00
Ca	43	2	He	33	187.35
Ca	44	2	He	1487	0.75
V	51	2	He	3618	0.14
Cr	52	2	He	11161	0.07
Mn	55	2	He	450	3.73
Fe	56	2	He	14387	0.04
Co	59	2	He	30	111.11
Ni	60	2	He	97	53.87
Cu	63	2	He	11431	0.03
Zn	66	2	He	633	2.56
As	75	2	He	264	4.43
Sb	121	2	He	643	2.30
Se	78	2	He	81	14.29

QC ISTD Table

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	nogas	1108445	1.66
In	115	1	nogas	1193955	0.40
Li	6	1	nogas	1052078	0.88

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	nogas	1107740	3.91
Ge	72	2	He	423647	1.96

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:37:46-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	10055	0.02
B	11	1	nogas	39585	0.00
Al	27	1	nogas	70414	0.00
P	31	1	nogas	26170	0.01
Ti	47	1	nogas	1963	0.31
Ni	60	1	nogas	6181	0.03
Cu	63	1	nogas	36929	0.01
Zn	66	1	nogas	5788	0.08
Se	77	1	nogas	3977	0.17
Se	82	1	nogas	340	1.50
Sr	88	1	nogas	28802	0.01
Mo	95	1	nogas	6335	0.06
Ag	107	1	nogas	14938	0.05
Cd	111	1	nogas	3210	0.44
Sn	118	1	nogas	10587	0.03
Sb	121	1	nogas	13687	0.02
Ba	137	1	nogas	4247	0.22
Tl	205	1	nogas	26773	0.01
Pb	208	1	nogas	36960	0.01
Na	23	2	He	402159	0.00
Mg	24	2	He	209112	0.00
Al	27	2	He	4914	0.09
K	39	2	He	328058	0.00
Ca	43	2	He	590	2.83
Ca	44	2	He	10977	0.01
V	51	2	He	13296	0.01
Cr	52	2	He	21469	0.00
Mn	55	2	He	9403	0.05
Fe	56	2	He	973274	0.00
Co	59	2	He	12162	0.03
Ni	60	2	He	3247	0.07
Cu	63	2	He	18872	0.02
Zn	66	2	He	2700	0.34
As	75	2	He	1430	0.07
Sb	121	2	He	7345	0.03
Se	78	2	He	225	1.59

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1114159	2.07	1108445	100.52	70	120	
In	115	1	nogas	1211017	0.61	1193955	101.43	70	120	
Li	6	1	nogas	1057950	0.81	1052078	100.56	70	120	
Bi	209	1	nogas	1127973	3.42	1107740	101.83	70	120	
Ge	72	2	He	427429	0.63	423647	100.89	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:39:48-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	24329	0.01
B	11	1	nogas	81281	0.00
Al	27	1	nogas	116864	0.00
P	31	1	nogas	26857	0.01
Ti	47	1	nogas	4651	0.10
Ni	60	1	nogas	12555	0.04
Cu	63	1	nogas	53485	0.00
Zn	66	1	nogas	10440	0.05
Se	77	1	nogas	3727	0.30
Se	82	1	nogas	640	3.30
Sr	88	1	nogas	67622	0.01
Mo	95	1	nogas	15125	0.01
Ag	107	1	nogas	35874	0.01
Cd	111	1	nogas	7519	0.06
Sn	118	1	nogas	22571	0.01
Sb	121	1	nogas	30155	0.00
Ba	137	1	nogas	10387	0.02
Tl	205	1	nogas	62530	0.00
Pb	208	1	nogas	87272	0.00
Na	23	2	He	892109	0.00
Mg	24	2	He	495706	0.00
Al	27	2	He	7785	0.04
K	39	2	He	626048	0.00
Ca	43	2	He	1470	0.67
Ca	44	2	He	25114	0.00
V	51	2	He	26271	0.01
Cr	52	2	He	35636	0.01
Mn	55	2	He	21202	0.01
Fe	56	2	He	2273332	0.00
Co	59	2	He	29369	0.01
Ni	60	2	He	7155	0.05
Cu	63	2	He	27920	0.00
Zn	66	2	He	4834	0.09
As	75	2	He	3251	0.08
Sb	121	2	He	16176	0.02
Se	78	2	He	406	1.79

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1114671	1.07	1108445	100.56	70	120	
In	115	1	nogas	1203631	0.61	1193955	100.81	70	120	
Li	6	1	nogas	1055529	0.51	1052078	100.33	70	120	
Bi	209	1	nogas	1132621	3.99	1107740	102.25	70	120	
Ge	72	2	He	432374	0.52	423647	102.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/1000
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:41:50-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	49480	0.00
B	11	1	nogas	155470	0.00
Al	27	1	nogas	202660	0.00
P	31	1	nogas	27528	0.01
Ti	47	1	nogas	9380	0.06
Ni	60	1	nogas	27165	0.02
Cu	63	1	nogas	84051	0.00
Zn	66	1	nogas	19536	0.00
Se	77	1	nogas	4131	0.11
Se	82	1	nogas	1010	0.85
Sr	88	1	nogas	137699	0.00
Mo	95	1	nogas	30519	0.02
Ag	107	1	nogas	71776	0.00
Cd	111	1	nogas	14664	0.03
Sn	118	1	nogas	44298	0.00
Sb	121	1	nogas	60065	0.01
Ba	137	1	nogas	20465	0.01
Tl	205	1	nogas	128813	0.00
Pb	208	1	nogas	174907	0.00
Na	23	2	He	1760618	0.00
Mg	24	2	He	999495	0.00
Al	27	2	He	13413	0.01
K	39	2	He	1149514	0.00
Ca	43	2	He	2757	0.08
Ca	44	2	He	48825	0.00
V	51	2	He	49275	0.00
Cr	52	2	He	60899	0.00
Mn	55	2	He	43205	0.00
Fe	56	2	He	5346252	0.00
Co	59	2	He	58470	0.00
Ni	60	2	He	14400	0.02
Cu	63	2	He	44533	0.00
Zn	66	2	He	9126	0.07
As	75	2	He	6254	0.04
Sb	121	2	He	31214	0.00
Se	78	2	He	800	0.89

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1129503	1.83	1108445	101.90	70	120	
In	115	1	nogas	1233698	0.93	1193955	103.33	70	120	
Li	6	1	nogas	1056599	0.94	1052078	100.43	70	120	
Bi	209	1	nogas	1147869	3.55	1107740	103.62	70	120	
Ge	72	2	He	438255	0.55	423647	103.45	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	018CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:43:53-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	508295	0.00
B	11	1	nogas	1494730	0.00
Al	27	1	nogas	2011486	0.00
P	31	1	nogas	58645	0.00
Ti	47	1	nogas	95899	0.00
Ni	60	1	nogas	264931	0.00
Cu	63	1	nogas	653015	0.00
Zn	66	1	nogas	185593	0.00
Se	77	1	nogas	11625	0.04
Se	82	1	nogas	10320	0.03
Sr	88	1	nogas	1426061	0.00
Mo	95	1	nogas	314268	0.00
Ag	107	1	nogas	740984	0.00
Cd	111	1	nogas	154920	0.00
Sn	118	1	nogas	443819	0.00
Sb	121	1	nogas	603650	0.00
Ba	137	1	nogas	209927	0.00
Tl	205	1	nogas	1346600	0.00
Pb	208	1	nogas	1845100	0.00
Na	23	2	He	18645024	0.00
Mg	24	2	He	10963916	0.00
Al	27	2	He	130974	0.00
K	39	2	He	11886883	0.00
Ca	43	2	He	29071	0.00
Ca	44	2	He	480401	0.00
V	51	2	He	471886	0.00
Cr	52	2	He	502763	0.00
Mn	55	2	He	431737	0.00
Fe	56	2	He	51270621	0.00
Co	59	2	He	584501	0.00
Ni	60	2	He	140858	0.00
Cu	63	2	He	359688	0.00
Zn	66	2	He	84639	0.00
As	75	2	He	64006	0.00
Sb	121	2	He	321811	0.00
Se	78	2	He	7655	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1169047	3.84	1108445	105.47	70	120	
In	115	1	nogas	1255094	1.49	1193955	105.12	70	120	
Li	6	1	nogas	1029135	1.90	1052078	97.82	70	120	
Bi	209	1	nogas	1178556	1.20	1107740	106.39	70	120	
Ge	72	2	He	444679	0.85	423647	104.96	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	019CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:45:56-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	989807	0.00
B	11	1	nogas	2965923	0.00
Al	27	1	nogas	2539470	0.00
P	31	1	nogas	89195	0.00
Ti	47	1	nogas	192296	0.00
Ni	60	1	nogas	521021	0.00
Cu	63	1	nogas	1247734	0.00
Zn	66	1	nogas	355714	0.00
Se	77	1	nogas	19036	0.02
Se	82	1	nogas	20264	0.01
Sr	88	1	nogas	2825633	0.00
Mo	95	1	nogas	630209	0.00
Ag	107	1	nogas	1465182	0.00
Cd	111	1	nogas	310680	0.00
Sn	118	1	nogas	901184	0.00
Sb	121	1	nogas	1204321	0.00
Ba	137	1	nogas	428397	0.00
Tl	205	1	nogas	2703665	0.00
Pb	208	1	nogas	3699076	0.00
Na	23	2	He	36389145	0.00
Mg	24	2	He	21024539	0.00
Al	27	2	He	166965	0.00
K	39	2	He	23050932	0.00
Ca	43	2	He	57660	0.00
Ca	44	2	He	956160	0.00
V	51	2	He	936613	0.00
Cr	52	2	He	978119	0.00
Mn	55	2	He	850665	0.00
Fe	56	2	He	99159649	0.00
Co	59	2	He	1167430	0.00
Ni	60	2	He	278010	0.00
Cu	63	2	He	690034	0.00
Zn	66	2	He	162399	0.00
As	75	2	He	123562	0.00
Sb	121	2	He	625703	0.00
Se	78	2	He	14469	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1192116	3.63	1108445	107.55	70	120	
In	115	1	nogas	1274614	2.03	1193955	106.76	70	120	
Li	6	1	nogas	981397	1.23	1052078	93.28	70	120	
Bi	209	1	nogas	1193356	1.00	1107740	107.73	70	120	
Ge	72	2	He	451083	0.59	423647	106.48	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV2
Data File Name	023LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:57:26-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	1.933	1.874	10208	2.21	2	96.6	70	120	
B	11	1	nogas	18.171	2.418	66759	1.64	10	181.7	70	120	NewName Main CR1 Failed
Al	27	1	nogas	3.379	3.851	71295	0.88	2	168.9	70	120	NewName Main CR1 Failed
P	31	1	nogas	18.156	129.372	26230	3.34	10	181.6	70	120	NewName Main CR1 Failed
Ti	47	1	nogas	2.136	11.281	2074	11.18	2	106.8	70	120	
Ni	60	1	nogas	2.376	3.125	6261	4.97	2	118.8	70	120	
Cu	63	1	nogas	0.405	30.943	27372	4.74	2	20.2	70	120	NewName Main CR1 Failed
Zn	66	1	nogas	2.553	2.337	5614	0.54	2	127.6	70	120	NewName Main CR1 Failed
Se	77	1	nogas	-12.218	-30.027	2704	11.40	2	-610.9	70	120	NewName Main CR1 Failed
Se	82	1	nogas	2.740	28.246	310	22.58	2	137.0	70	120	NewName Main CR1 Failed
Sr	88	1	nogas	2.108	4.240	29289	4.14	2	105.4	70	120	
Mo	95	1	nogas	2.210	6.996	6905	7.25	2	110.5	70	120	
Ag	107	1	nogas	2.115	0.957	15158	1.25	2	105.8	70	120	
Cd	111	1	nogas	2.001	3.153	3017	2.78	2	100.1	70	120	
Sn	118	1	nogas	2.379	2.950	12315	2.62	2	118.9	70	120	
Sb	121	1	nogas	2.885	3.601	17714	2.44	2	144.3	70	120	NewName Main CR1 Failed
Ba	137	1	nogas	1.962	5.529	4141	5.63	2	98.1	70	120	
Tl	205	1	nogas	2.055	6.829	26800	3.10	2	102.7	70	120	
Pb	208	1	nogas	2.101	5.441	38152	1.83	2	105.0	70	120	
Pb	206	1	nogas	2.107	7.900	9627	4.47	2	105.4	70	120	
Pb	207	1	nogas	2.072	8.812	8163	5.73	2	103.6	70	120	
U	238	1	nogas	1.865	6.671	41725	2.90	2	93.3	70	120	
Li	7	1	nogas	2.021	2.619	108678	1.27	2	101.0	70	120	
Ba	135	1	nogas	2.120	5.062	2560	5.37	2	106.0	70	120	
Tl	203	1	nogas	2.043	8.779	11045	5.13	2	102.2	70	120	
Na	23	2	He	207.028	0.537	404347	0.37	200	103.5	70	120	
Mg	24	2	He	204.875	1.435	210007	1.67	200	102.4	70	120	
Al	27	2	He	2.498	11.012	4918	7.25	2	124.9	70	120	NewName Main CR1 Failed
K	39	2	He	200.466	1.414	335125	0.68	200	100.2	70	120	
Ca	43	2	He	217.811	14.360	640	13.35	200	108.9	70	120	
Ca	44	2	He	210.565	2.294	11218	2.21	200	105.3	70	120	
V	51	2	He	1.888	2.542	12198	1.52	2	94.4	70	120	
Cr	52	2	He	2.077	4.755	21142	1.93	2	103.8	70	120	
Mn	55	2	He	2.144	0.620	9273	0.39	2	107.2	70	120	
Fe	56	2	He	200.355	0.690	978933	0.67	200	100.2	70	120	
Co	59	2	He	2.170	1.397	12245	1.13	2	108.5	70	120	
Ni	60	2	He	2.215	7.143	3074	6.67	2	110.8	70	120	
Cu	63	2	He	0.696	11.445	13983	2.10	2	34.8	70	120	NewName Main CR1 Failed
Zn	66	2	He	2.458	4.774	2580	3.38	2	122.9	70	120	NewName Main CR1 Failed
As	75	2	He	2.053	6.769	1499	5.59	2	102.7	70	120	
Se	77	2	He	0.869	281.364	93	54.98	2	43.4	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.866	2.840	9343	2.78	2	143.3	70	120	NewName Main CR1 Failed
Se	78	2	He	2.439	24.543	254	16.27	2	122.0	70	120	NewName Main CR1 Failed
Ti	47	2	He	2.067	8.864	483	8.36	2	103.3	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1125352	2.12	1108445	101.53	70	120	
In	115	1	nogas	1234489	0.41	1193955	103.39	70	120	
Li	6	1	nogas	1048877	0.42	1052078	99.70	70	120	
Bi	209	1	nogas	1146448	3.85	1107740	103.49	70	120	
Ge	72	2	He	433610	0.27	423647	102.35	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV5
Data File Name	024LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:59:28-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.605	0.990	24339	1.60	5	92.1	70	130	
B	11	1	nogas	28.122	1.574	98166	1.93	25	112.5	70	130	
Al	27	1	nogas	6.815	1.143	116666	2.27	5	136.3	70	130	NewName Main CR1 Failed
P	31	1	nogas	37.959	39.425	27335	3.77	25	151.8	70	130	NewName Main CR1 Failed
Ti	47	1	nogas	5.036	6.737	4694	5.84	5	100.7	70	130	
Ni	60	1	nogas	5.179	1.421	13153	2.80	5	103.6	70	130	
Cu	63	1	nogas	3.435	0.514	44830	1.43	5	68.7	70	130	NewName Main CR1 Failed
Zn	66	1	nogas	5.485	1.457	10541	2.17	5	109.7	70	130	
Se	77	1	nogas	-3.617	-38.265	3314	2.64	5	-72.3	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.866	15.502	610	15.81	5	117.3	70	130	
Sr	88	1	nogas	4.983	2.022	67976	1.74	5	99.7	70	130	
Mo	95	1	nogas	5.031	1.981	15342	1.29	5	100.6	70	130	
Ag	107	1	nogas	5.052	1.729	35667	1.91	5	101.0	70	130	
Cd	111	1	nogas	4.991	6.834	7432	6.16	5	99.8	70	130	
Sn	118	1	nogas	5.136	1.576	24020	2.14	5	102.7	70	130	
Sb	121	1	nogas	5.590	2.226	33032	3.49	5	111.8	70	130	
Ba	137	1	nogas	5.071	2.117	10454	2.90	5	101.4	70	130	
Tl	205	1	nogas	5.001	5.428	64228	1.42	5	100.0	70	130	
Pb	208	1	nogas	5.007	5.486	88628	1.26	5	100.1	70	130	
U	238	1	nogas	4.467	4.573	98588	1.59	5	89.3	70	130	
Li	7	1	nogas	4.670	1.197	155118	0.64	5	93.4	70	130	
Na	23	2	He	487.388	1.428	903777	0.84	500	97.5	70	130	
Mg	24	2	He	482.884	1.501	497418	0.99	500	96.6	70	130	
Al	27	2	He	4.715	3.068	7759	2.98	5	94.3	70	130	
K	39	2	He	463.611	1.366	631682	0.49	500	92.7	70	130	
Ca	43	2	He	537.806	9.205	1540	8.52	500	107.6	70	130	
Ca	44	2	He	494.885	1.058	24470	0.75	500	99.0	70	130	
V	51	2	He	4.731	1.980	25156	1.36	5	94.6	70	130	
Cr	52	2	He	5.002	8.092	35038	5.04	5	100.0	70	130	
Mn	55	2	He	5.115	3.006	21626	2.36	5	102.3	70	130	
Fe	56	2	He	466.267	0.942	2273564	0.30	500	93.3	70	130	
Co	59	2	He	5.057	1.328	28688	0.94	5	101.1	70	130	
Ni	60	2	He	5.137	4.190	7045	3.71	5	102.7	70	130	
Cu	63	2	He	3.603	7.133	23686	2.95	5	72.1	70	130	
Zn	66	2	He	5.370	1.584	4901	1.24	5	107.4	70	130	
As	75	2	He	4.989	4.488	3277	3.64	5	99.8	70	130	
Sb	121	2	He	5.634	2.972	17848	3.35	5	112.7	70	130	
Se	78	2	He	5.486	4.165	471	3.93	5	109.7	70	130	
Ti	47	2	He	4.907	6.186	1137	6.72	5	98.1	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1121275	1.43	1108445	101.16	70	120	
In	115	1	nogas	1219439	0.79	1193955	102.13	70	120	
Li	6	1	nogas	1051320	0.61	1052078	99.93	70	120	
Bi	209	1	nogas	1131349	4.35	1107740	102.13	70	120	
Ge	72	2	He	436491	0.64	423647	103.03	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	026_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T11:04:48-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.005	42.5	53	19.5	1	
B	11	1	nogas	2.543	9.0	17739	3.5	10	
Al	27	1	nogas	2.190	2.5	54185	1.6	5	
P	31	1	nogas	13.381	73.6	25355	1.6	10	ICB Main CR1 Failed
Ti	47	1	nogas	0.050	50.0	170	11.8	2.5	
Ni	60	1	nogas	0.021	132.3	417	14.7	2.5	
Cu	63	1	nogas	-1.748	-7.8	14487	5.1	1	
Zn	66	1	nogas	0.481	10.9	2060	5.6	2.5	
Se	77	1	nogas	-6.272	-3.8	3060	1.7	2.5	
Se	82	1	nogas	0.289	78.7	73	28.4	1	
Sr	88	1	nogas	0.031	8.3	713	5.7	2.5	
Mo	95	1	nogas	0.019	162.0	197	46.1	2.5	
Ag	107	1	nogas	0.007	68.0	117	26.2	2.5	
Cd	111	1	nogas	0.005	86.6	7	86.6	1	
Sn	118	1	nogas	0.194	15.0	2714	4.2	5	
Sb	121	1	nogas	0.187	1.7	2274	2.5	2	
Ba	137	1	nogas	0.100	24.6	273	18.4	2.5	
Tl	205	1	nogas	0.006	48.4	183	19.2	1	
Pb	208	1	nogas	0.024	14.6	1177	3.4	2.5	
U	238	1	nogas	0.006	20.7	173	13.3	2.5	
Na	23	2	He	3.182	18.1	44207	2.5	100	
Mg	24	2	He	1.459	10.7	2023	6.7	100	
Al	27	2	He	1.446	14.9	3487	6.6	5	
K	39	2	He	0.147	1145.8	109269	1.7	100	
Ca	43	2	He	6.174	157.3	50	52.9	100	
Ca	44	2	He	4.879	98.0	1697	13.4	100	
V	51	2	He	-0.099	-9.7	3167	2.3	2.5	
Cr	52	2	He	0.162	108.2	11835	6.1	2.5	
Mn	55	2	He	0.081	11.0	770	3.9	2.5	
Fe	56	2	He	2.771	2.4	27238	1.2	100	
Co	59	2	He	0.006	18.7	63	9.1	2.5	
Ni	60	2	He	0.075	41.9	193	20.9	2.5	
Cu	63	2	He	-1.387	-5.4	6935	2.5	1	
Zn	66	2	He	0.384	41.1	923	13.5	2.5	
As	75	2	He	-0.041	-84.3	239	9.1	2.5	
Sb	121	2	He	0.215	25.2	1273	13.2	2	
Se	78	2	He	-0.090	-114.1	75	9.4	1	
Ti	47	2	He	0.076	120.6	30	66.7	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1099166	1.76	1108445	99.16	70	120	
In	115	1	nogas	1193180	1.12	1193955	99.94	70	120	
Li	6	1	nogas	1045027	0.49	1052078	99.33	70	120	

Initial Calibration Blank (ICB) Report

Bi	209	1	nogas	1107509	3.96	1107740	99.98	70	120	
Ge	72	2	He	421047	0.97	423647	99.39	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	028ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T11:11:27-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.002	111.7	37	28.4	0	ICSA Main CR1 Failed
B	11	1	nogas	2.830	1.0	17987	0.9	0	ICSA Main CR1 Failed
Al	27	1	nogas	88964.315	2.0	1128910730	0.6	0	
P	31	1	nogas	1082078.060	2.4	61643172	0.7	0	
Ti	47	1	nogas	2216.457	0.6	1923117	2.5	0	
Ni	60	1	nogas	1.620	2.9	4184	4.9	0	ICSA Main CR1 Failed
Cu	63	1	nogas	-2.252	-4.3	11338	2.7	0	ICSA Main CR1 Failed
Zn	66	1	nogas	3.759	2.6	7295	0.4	0	ICSA Main CR1 Failed
Se	77	1	nogas	17.042	7.1	4601	2.8	0	
Se	82	1	nogas	1.113	34.1	147	21.9	0	ICSA Main CR1 Failed
Sr	88	1	nogas	4.934	2.1	61026	1.8	0	ICSA Main CR1 Failed
Mo	95	1	nogas	2422.590	1.8	6634698	1.5	0	
Ag	107	1	nogas	0.191	20.0	1280	18.0	0	ICSA Main CR1 Failed
Cd	111	1	nogas	2.864	0.9	3867	1.0	0	
Sn	118	1	nogas	0.270	12.0	2810	5.2	0	ICSA Main CR1 Failed
Sb	121	1	nogas	0.401	7.6	3384	5.9	0	ICSA Main CR1 Failed
Ba	137	1	nogas	0.753	11.7	1463	10.5	0	ICSA Main CR1 Failed
Tl	205	1	nogas	0.016	4.8	280	0.0	0	ICSA Main CR1 Failed
Pb	208	1	nogas	0.339	16.8	5954	12.3	0	ICSA Main CR1 Failed
Na	23	2	He	113169.881	0.5	188489324	0.3	0	
Mg	24	2	He	112061.979	1.4	108357632	1.5	0	
Al	27	2	He	64344.741	0.6	76599037	0.8	0	
K	39	2	He	111272.172	1.2	117075538	1.0	0	
Ca	43	2	He	102576.713	1.6	269976	1.3	0	
Ca	44	2	He	117277.412	0.7	5110031	0.7	0	
V	51	2	He	0.100	32.8	3931	3.6	0	ICSA Main CR1 Failed
Cr	52	2	He	1.769	10.8	18642	4.5	0	ICSA Main CR1 Failed
Mn	55	2	He	1.051	8.5	4524	7.7	0	ICSA Main CR1 Failed
Fe	56	2	He	110897.981	1.2	504887592	0.9	0	
Co	59	2	He	0.535	2.2	2880	2.4	0	ICSA Main CR1 Failed
Ni	60	2	He	1.152	9.2	1557	8.5	0	ICSA Main CR1 Failed
Cu	63	2	He	-2.054	-1.3	4684	2.0	0	ICSA Main CR1 Failed
Zn	66	2	He	2.950	4.2	2807	3.6	0	ICSA Main CR1 Failed
As	75	2	He	0.290	30.2	420	11.7	0	ICSA Main CR1 Failed
Sb	121	2	He	0.403	7.0	1780	4.5	0	ICSA Main CR1 Failed
Se	78	2	He	0.060	227.5	83	10.9	0	ICSA Main CR1 Failed
Ti	47	2	He	2178.931	1.9	468492	1.6	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1072556	2.48	1108445	96.76	70	120	
In	115	1	nogas	1105460	0.97	1193955	92.59	70	120	
Li	6	1	nogas	1008754	0.71	1052078	95.88	70	120	
Bi	209	1	nogas	1001686	3.27	1107740	90.43	70	120	
Ge	72	2	He	410197	0.27	423647	96.83	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	029ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T11:13:27-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	98.491	0.654	506128	1.93	100	98.5	80	120	
B	11	1	nogas	490.502	1.504	1508978	2.92	100	490.5	80	120	
Al	27	1	nogas	83609.177	3.573	1154487236	0.78	100	83609.2	80	120	ICSB Main CR1 Failed
Ti	47	1	nogas	2310.722	0.298	2183139	4.18	100	2310.7	80	120	
Ni	60	1	nogas	98.869	0.851	254408	3.67	100	98.9	80	120	
Cu	63	1	nogas	97.574	1.051	615315	5.15	100	97.6	80	120	
Zn	66	1	nogas	102.733	1.541	181865	5.24	100	102.7	80	120	
Se	77	1	nogas	136.715	4.294	14034	5.09	100	136.7	80	120	
Se	82	1	nogas	106.485	1.060	10671	3.19	100	106.5	80	120	
Sr	88	1	nogas	112.400	0.634	1492407	3.17	100	112.4	80	120	
Mo	95	1	nogas	2423.262	1.740	7153454	0.93	100	2423.3	80	120	ICSB Main CR1 Failed
Ag	107	1	nogas	99.504	1.647	685404	4.11	100	99.5	80	120	
Cd	111	1	nogas	104.301	1.733	151866	3.92	100	104.3	80	120	
Sn	118	1	nogas	105.295	2.135	444386	4.49	100	105.3	80	120	
Sb	121	1	nogas	104.983	0.327	622667	3.94	100	105.0	80	120	
Ba	137	1	nogas	105.499	1.432	211129	4.01	100	105.5	80	120	
Tl	205	1	nogas	103.544	4.265	1281374	4.70	100	103.5	80	120	
Pb	208	1	nogas	103.757	4.963	1757524	5.41	100	103.8	80	120	
U	238	1	nogas	98.529	4.893	2097458	5.26	100	98.5	80	120	
Na	23	2	He	116212.422	2.866	210123644	0.40	100	116212.4	80	120	ICSB Main CR1 Failed
Mg	24	2	He	115649.052	2.572	121404318	0.62	100	115649.1	80	120	ICSB Main CR1 Failed
Al	27	2	He	58763.281	2.236	75949597	0.48	100	58763.3	80	120	ICSB Main CR1 Failed
K	39	2	He	114481.212	2.372	130773408	0.75	100	114481.2	80	120	ICSB Main CR1 Failed
Ca	43	2	He	110708.268	2.093	316370	0.90	100	110708.3	80	120	
Ca	44	2	He	122577.183	0.670	5800288	2.05	100	122577.2	80	120	ICSB Main CR1 Failed
V	51	2	He	102.114	2.253	475726	0.59	100	102.1	80	120	
Cr	52	2	He	102.146	2.316	502056	0.53	100	102.1	80	120	
Mn	55	2	He	103.350	2.003	436826	0.81	100	103.3	80	120	
Fe	56	2	He	114545.238	1.565	566267405	1.14	100	114545.2	80	120	ICSB Main CR1 Failed
Co	59	2	He	100.372	3.033	580291	0.78	100	100.4	80	120	
Ni	60	2	He	97.927	1.941	135231	1.69	100	97.9	80	120	
Cu	63	2	He	97.084	2.382	339527	0.70	100	97.1	80	120	
Zn	66	2	He	103.408	1.747	84132	1.24	100	103.4	80	120	
As	75	2	He	108.471	2.115	66937	0.59	100	108.5	80	120	
Sb	121	2	He	104.837	1.730	326933	1.24	100	104.8	80	120	
Se	78	2	He	106.513	0.594	7753	2.51	100	106.5	80	120	
Ti	47	2	He	2228.773	1.818	520353	1.36	100	2228.8	80	120	ICSB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1167885	4.16	1108445	105.36	70	120	
In	115	1	nogas	1191841	2.63	1193955	99.82	70	120	
Li	6	1	nogas	1023354	1.50	1052078	97.27	70	120	
Bi	209	1	nogas	1090120	1.29	1107740	98.41	70	120	
Ge	72	2	He	445533	2.70	423647	105.17	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	267CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:40:48-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	32	28.79
B	11	1	nogas	18930	0.00
Al	27	1	nogas	34089	0.06
P	31	1	nogas	21382	0.01
Ti	47	1	nogas	163	15.15
Ni	60	1	nogas	317	9.43
Cu	63	1	nogas	2380	0.29
Zn	66	1	nogas	890	0.76
Se	77	1	nogas	4871	0.08
Se	82	1	nogas	103	32.89
Sr	88	1	nogas	410	1.03
Mo	95	1	nogas	247	5.77
Ag	107	1	nogas	127	9.52
Sn	118	1	nogas	1160	0.83
Sb	121	1	nogas	943	1.44
Ba	137	1	nogas	60	111.11
Tl	205	1	nogas	97	58.94
Pb	208	1	nogas	1010	0.64
Li	7	1	nogas	72236	0.00
Na	23	2	He	43990	0.00
Mg	24	2	He	667	1.60
Al	27	2	He	1877	0.62
K	39	2	He	111021	0.00
Ca	43	2	He	33	137.48
Ca	44	2	He	800	0.31
V	51	2	He	6395	0.05
Cr	52	2	He	11521	0.04
Mn	55	2	He	453	0.28
Fe	56	2	He	19283	0.01
Co	59	2	He	17	415.69
Ni	60	2	He	150	16.02
Cu	63	2	He	1317	0.09
Zn	66	2	He	400	0.62
As	75	2	He	282	5.27
Sb	121	2	He	523	4.02
Se	78	2	He	130	3.13

QC ISTD Table

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	nogas	1242233	0.85
In	115	1	nogas	1329984	1.06
Li	6	1	nogas	1019193	0.45

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	nogas	1120972	4.64
Ge	72	2	He	464162	1.05

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	268CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:42:51-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	9705	0.01
B	11	1	nogas	46578	0.00
Al	27	1	nogas	54747	0.00
P	31	1	nogas	22083	0.02
Ti	47	1	nogas	2324	0.33
Ni	60	1	nogas	6258	0.04
Cu	63	1	nogas	15648	0.01
Zn	66	1	nogas	5174	0.06
Se	77	1	nogas	5108	0.06
Se	82	1	nogas	400	4.10
Sr	88	1	nogas	34544	0.00
Mo	95	1	nogas	7515	0.01
Ag	107	1	nogas	17331	0.02
Cd	111	1	nogas	3417	0.23
Sn	118	1	nogas	11405	0.02
Sb	121	1	nogas	13240	0.02
Ba	137	1	nogas	5084	0.11
Tl	205	1	nogas	28139	0.01
Pb	208	1	nogas	39687	0.01
Na	23	2	He	408418	0.00
Mg	24	2	He	210275	0.00
Al	27	2	He	3544	0.21
K	39	2	He	350613	0.00
Ca	43	2	He	687	1.05
Ca	44	2	He	11495	0.01
V	51	2	He	17106	0.01
Cr	52	2	He	23442	0.00
Mn	55	2	He	10170	0.03
Fe	56	2	He	1045832	0.00
Co	59	2	He	12992	0.02
Ni	60	2	He	3447	0.03
Cu	63	2	He	8596	0.03
Zn	66	2	He	2180	0.37
As	75	2	He	1707	0.13
Sb	121	2	He	6992	0.06
Se	78	2	He	297	2.37

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1245996	1.21	1242233	100.30	70	120	
In	115	1	nogas	1332076	0.94	1329984	100.16	70	120	
Li	6	1	nogas	1016036	0.25	1019193	99.69	70	120	
Bi	209	1	nogas	1135220	3.20	1120972	101.27	70	120	
Ge	72	2	He	466914	0.62	464162	100.59	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	269CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:44:54-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	23888	0.01
B	11	1	nogas	88128	0.00
Al	27	1	nogas	89700	0.00
P	31	1	nogas	23589	0.00
Ti	47	1	nogas	5691	0.05
Ni	60	1	nogas	15685	0.01
Cu	63	1	nogas	36906	0.00
Zn	66	1	nogas	11214	0.04
Se	77	1	nogas	5288	0.06
Se	82	1	nogas	753	0.67
Sr	88	1	nogas	86238	0.00
Mo	95	1	nogas	17928	0.02
Ag	107	1	nogas	42506	0.01
Cd	111	1	nogas	8743	0.03
Sn	118	1	nogas	26735	0.00
Sb	121	1	nogas	32096	0.00
Ba	137	1	nogas	12275	0.03
Tl	205	1	nogas	70197	0.01
Pb	208	1	nogas	97474	0.00
Na	23	2	He	942211	0.00
Mg	24	2	He	517289	0.00
Al	27	2	He	5381	0.04
K	39	2	He	701825	0.00
Ca	43	2	He	1687	0.25
Ca	44	2	He	27766	0.00
V	51	2	He	31741	0.01
Cr	52	2	He	38315	0.01
Mn	55	2	He	24383	0.01
Fe	56	2	He	2535024	0.00
Co	59	2	He	32973	0.01
Ni	60	2	He	8039	0.02
Cu	63	2	He	20000	0.02
Zn	66	2	He	4868	0.01
As	75	2	He	3759	0.04
Sb	121	2	He	16827	0.01
Se	78	2	He	534	0.69

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1246872	1.20	1242233	100.37	70	120	
In	115	1	nogas	1342284	0.20	1329984	100.92	70	120	
Li	6	1	nogas	1016955	0.86	1019193	99.78	70	120	
Bi	209	1	nogas	1151572	4.34	1120972	102.73	70	120	
Ge	72	2	He	469462	0.51	464162	101.14	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/1000
Data File Name	270CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:46:58-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	47856	0.00
B	11	1	nogas	160235	0.00
Al	27	1	nogas	151987	0.00
P	31	1	nogas	26882	0.01
Ti	47	1	nogas	11294	0.03
Ni	60	1	nogas	30745	0.01
Cu	63	1	nogas	74243	0.00
Zn	66	1	nogas	21372	0.01
Se	77	1	nogas	5531	0.10
Se	82	1	nogas	1377	0.22
Sr	88	1	nogas	171019	0.00
Mo	95	1	nogas	36509	0.00
Ag	107	1	nogas	84504	0.00
Cd	111	1	nogas	18108	0.01
Sn	118	1	nogas	52740	0.01
Sb	121	1	nogas	65756	0.00
Ba	137	1	nogas	25132	0.01
Tl	205	1	nogas	141798	0.00
Pb	208	1	nogas	194141	0.00
Na	23	2	He	1856720	0.00
Mg	24	2	He	1039198	0.00
Al	27	2	He	9963	0.03
K	39	2	He	1295595	0.00
Ca	43	2	He	3330	0.13
Ca	44	2	He	54990	0.00
V	51	2	He	57789	0.00
Cr	52	2	He	66630	0.00
Mn	55	2	He	48742	0.01
Fe	56	2	He	6139401	0.00
Co	59	2	He	64080	0.00
Ni	60	2	He	15518	0.02
Cu	63	2	He	39369	0.00
Zn	66	2	He	9303	0.05
As	75	2	He	7294	0.02
Sb	121	2	He	33118	0.01
Se	78	2	He	945	0.49

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1256449	1.23	1242233	101.14	70	120	
In	115	1	nogas	1360698	0.84	1329984	102.31	70	120	
Li	6	1	nogas	1015407	1.30	1019193	99.63	70	120	
Bi	209	1	nogas	1156951	2.70	1120972	103.21	70	120	
Ge	72	2	He	478144	0.62	464162	103.01	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	271CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:49:02-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	484891	0.00
B	11	1	nogas	1453898	0.00
Al	27	1	nogas	1247284	0.00
P	31	1	nogas	60346	0.00
Ti	47	1	nogas	114781	0.00
Ni	60	1	nogas	307139	0.00
Cu	63	1	nogas	721250	0.00
Zn	66	1	nogas	208167	0.00
Se	77	1	nogas	12916	0.02
Se	82	1	nogas	12232	0.05
Sr	88	1	nogas	1762015	0.00
Mo	95	1	nogas	375463	0.00
Ag	107	1	nogas	871929	0.00
Cd	111	1	nogas	184266	0.00
Sn	118	1	nogas	538984	0.00
Sb	121	1	nogas	677207	0.00
Ba	137	1	nogas	258693	0.00
Tl	205	1	nogas	1479888	0.00
Pb	208	1	nogas	2031822	0.00
Na	23	2	He	19815026	0.00
Mg	24	2	He	11541071	0.00
Al	27	2	He	79288	0.00
K	39	2	He	13731373	0.00
Ca	43	2	He	32288	0.00
Ca	44	2	He	543091	0.00
V	51	2	He	538471	0.00
Cr	52	2	He	559862	0.00
Mn	55	2	He	486584	0.00
Fe	56	2	He	59318889	0.00
Co	59	2	He	658258	0.00
Ni	60	2	He	158044	0.00
Cu	63	2	He	383214	0.00
Zn	66	2	He	91854	0.00
As	75	2	He	71177	0.00
Sb	121	2	He	347852	0.00
Se	78	2	He	8505	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1304024	3.21	1242233	104.97	70	120	
In	115	1	nogas	1390341	2.89	1329984	104.54	70	120	
Li	6	1	nogas	976552	1.28	1019193	95.82	70	120	
Bi	209	1	nogas	1203048	0.94	1120972	107.32	70	120	
Ge	72	2	He	482117	1.24	464162	103.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	272CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:51:05-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	950659	0.00
B	11	1	nogas	2851901	0.00
Al	27	1	nogas	2337278	0.00
P	31	1	nogas	92850	0.00
Ti	47	1	nogas	222668	0.00
Ni	60	1	nogas	599566	0.00
Cu	63	1	nogas	1409707	0.00
Zn	66	1	nogas	406636	0.00
Se	77	1	nogas	22157	0.01
Se	82	1	nogas	23609	0.01
Sr	88	1	nogas	3975640	0.00
Mo	95	1	nogas	750006	0.00
Ag	107	1	nogas	1720688	0.00
Cd	111	1	nogas	359976	0.00
Sn	118	1	nogas	1087309	0.00
Sb	121	1	nogas	1429431	0.00
Ba	137	1	nogas	514525	0.00
Tl	205	1	nogas	3194327	0.00
Pb	208	1	nogas	4085190	0.00
Na	23	2	He	38875997	0.00
Mg	24	2	He	22486236	0.00
Al	27	2	He	149201	0.00
K	39	2	He	26563005	0.00
Ca	43	2	He	64681	0.00
Ca	44	2	He	1059035	0.00
V	51	2	He	1051733	0.00
Cr	52	2	He	1084604	0.00
Mn	55	2	He	955225	0.00
Fe	56	2	He	114857452	0.00
Co	59	2	He	1293479	0.00
Ni	60	2	He	306970	0.00
Cu	63	2	He	745485	0.00
Zn	66	2	He	178127	0.00
As	75	2	He	139031	0.00
Sb	121	2	He	711022	0.00
Se	78	2	He	16347	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1298265	3.83	1242233	104.51	70	120	
In	115	1	nogas	1395713	2.44	1329984	104.94	70	120	
Li	6	1	nogas	926974	1.94	1019193	90.95	70	120	
Bi	209	1	nogas	1209451	1.22	1120972	107.89	70	120	
Ge	72	2	He	482303	0.31	464162	103.91	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICCV2
Data File Name	275LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:57:14-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	2.037	2.543	10467	2.64	2	101.8	70	120	
B	11	1	nogas	20.942	5.275	82588	4.16	10	209.4	70	120	NewName Main CR1 Failed
Al	27	1	nogas	1.996	7.856	56825	2.90	2	99.8	70	120	
P	31	1	nogas	49.172	9.875	24977	1.30	10	491.7	70	120	NewName Main CR1 Failed
Ti	47	1	nogas	2.319	1.800	2670	1.50	2	116.0	70	120	
Ni	60	1	nogas	2.162	5.855	6602	5.46	2	108.1	70	120	
Cu	63	1	nogas	2.225	5.299	17577	4.23	2	111.3	70	120	
Zn	66	1	nogas	2.134	3.011	5094	2.79	2	106.7	70	120	
Se	77	1	nogas	-24.052	-6.430	2970	4.42	2	-1202.6	70	120	NewName Main CR1 Failed
Se	82	1	nogas	3.089	9.216	457	7.04	2	154.4	70	120	NewName Main CR1 Failed
Sr	88	1	nogas	1.927	0.780	36793	0.08	2	96.4	70	120	
Mo	95	1	nogas	2.485	1.422	9306	2.20	2	124.3	70	120	NewName Main CR1 Failed
Ag	107	1	nogas	2.157	2.936	18208	2.92	2	107.9	70	120	
Cd	111	1	nogas	2.015	4.120	3540	3.33	2	100.8	70	120	
Sn	118	1	nogas	2.883	1.079	16360	1.84	2	144.1	70	120	NewName Main CR1 Failed
Sb	121	1	nogas	3.008	1.072	21456	1.30	2	150.4	70	120	NewName Main CR1 Failed
Ba	137	1	nogas	2.095	6.743	5301	6.08	2	104.8	70	120	
Tl	205	1	nogas	2.135	4.159	32349	1.82	2	106.7	70	120	
Pb	208	1	nogas	2.143	5.313	42967	1.02	2	107.1	70	120	
Pb	206	1	nogas	2.176	3.657	10978	1.73	2	108.8	70	120	
Pb	207	1	nogas	2.127	2.118	9340	3.39	2	106.4	70	120	
U	238	1	nogas	1.883	5.902	48181	0.70	2	94.1	70	120	
Li	7	1	nogas	2.127	4.085	108698	1.29	2	106.4	70	120	
Ba	135	1	nogas	2.167	4.554	3120	3.94	2	108.4	70	120	
Tl	203	1	nogas	2.262	5.981	13647	2.07	2	113.1	70	120	
Na	23	2	He	200.281	0.995	423487	0.37	200	100.1	70	120	
Mg	24	2	He	196.561	1.307	216464	1.52	200	98.3	70	120	
Al	27	2	He	2.534	12.972	3727	6.71	2	126.7	70	120	NewName Main CR1 Failed
K	39	2	He	193.531	0.501	362127	0.59	200	96.8	70	120	
Ca	43	2	He	198.603	19.507	657	18.17	200	99.3	70	120	
Ca	44	2	He	207.482	7.550	11528	7.20	200	103.7	70	120	
V	51	2	He	1.567	4.765	14440	2.87	2	78.4	70	120	
Cr	52	2	He	2.172	3.996	22994	1.38	2	108.6	70	120	
Mn	55	2	He	2.095	5.531	10210	5.28	2	104.8	70	120	
Fe	56	2	He	192.199	0.754	1098804	1.38	200	96.1	70	120	
Co	59	2	He	2.142	2.104	13526	2.76	2	107.1	70	120	
Ni	60	2	He	2.245	2.081	3517	2.42	2	112.2	70	120	
Cu	63	2	He	2.053	0.706	8789	0.37	2	102.6	70	120	
Zn	66	2	He	2.145	9.119	2267	8.16	2	107.2	70	120	
As	75	2	He	2.209	2.603	1780	1.81	2	110.4	70	120	
Se	77	2	He	3.274	71.718	143	39.67	2	163.7	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.967	6.398	10721	6.33	2	148.3	70	120	NewName Main CR1 Failed
Se	78	2	He	2.963	14.358	366	9.00	2	148.1	70	120	NewName Main CR1 Failed
Ti	47	2	He	2.291	5.666	593	5.42	2	114.5	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1253732	0.35	1242233	100.93	70	120	
In	115	1	nogas	1355205	0.85	1329984	101.90	70	120	
Li	6	1	nogas	1005866	0.11	1019193	98.69	70	120	
Bi	209	1	nogas	1160975	5.39	1120972	103.57	70	120	
Ge	72	2	He	468531	0.67	464162	100.94	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICCV5
Data File Name	276LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:59:45-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.607	2.230	23858	1.92	5	92.1	70	130	
B	11	1	nogas	28.305	2.452	106042	1.42	25	113.2	70	130	
Al	27	1	nogas	5.265	4.133	92573	3.10	5	105.3	70	130	
P	31	1	nogas	58.507	18.481	25361	3.36	25	234.0	70	130	NewName Main CR1 Failed
Ti	47	1	nogas	5.137	7.519	5654	6.95	5	102.7	70	130	
Ni	60	1	nogas	5.311	2.732	15585	2.16	5	106.2	70	130	
Cu	63	1	nogas	5.201	1.320	37491	1.84	5	104.0	70	130	
Zn	66	1	nogas	5.242	3.642	11091	3.75	5	104.8	70	130	
Se	77	1	nogas	-20.587	-4.307	3217	1.79	5	-411.7	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.665	19.437	743	17.14	5	113.3	70	130	
Sr	88	1	nogas	4.571	3.700	86302	2.71	5	91.4	70	130	
Mo	95	1	nogas	5.035	4.217	18512	3.27	5	100.7	70	130	
Ag	107	1	nogas	5.082	2.954	42529	2.04	5	101.6	70	130	
Cd	111	1	nogas	4.919	1.559	8606	0.59	5	98.4	70	130	
Sn	118	1	nogas	5.277	3.780	28839	2.85	5	105.5	70	130	
Sb	121	1	nogas	5.352	2.842	37041	2.86	5	107.0	70	130	
Ba	137	1	nogas	4.841	6.165	12115	5.33	5	96.8	70	130	
Tl	205	1	nogas	4.710	9.992	71795	3.17	5	94.2	70	130	
Pb	208	1	nogas	4.893	9.023	97604	2.22	5	97.9	70	130	
U	238	1	nogas	4.130	9.006	106589	2.38	5	82.6	70	130	
Li	7	1	nogas	4.806	2.066	157272	0.77	5	96.1	70	130	
Na	23	2	He	474.238	0.963	944097	0.17	500	94.8	70	130	
Mg	24	2	He	468.828	1.115	516490	0.98	500	93.8	70	130	
Al	27	2	He	4.958	1.798	5491	1.74	5	99.2	70	130	
K	39	2	He	455.731	1.241	702422	0.33	500	91.1	70	130	
Ca	43	2	He	460.870	6.132	1483	5.89	500	92.2	70	130	
Ca	44	2	He	517.056	0.695	27582	1.31	500	103.4	70	130	
V	51	2	He	4.617	0.753	30042	1.42	5	92.3	70	130	
Cr	52	2	He	5.199	4.957	38920	3.45	5	104.0	70	130	
Mn	55	2	He	5.082	3.974	24166	3.46	5	101.6	70	130	
Fe	56	2	He	453.777	0.742	2573306	0.72	500	90.8	70	130	
Co	59	2	He	5.108	1.996	32295	1.94	5	102.2	70	130	
Ni	60	2	He	5.251	2.143	8042	2.32	5	105.0	70	130	
Cu	63	2	He	5.111	3.515	19947	3.49	5	102.2	70	130	
Zn	66	2	He	5.148	1.411	4884	1.39	5	103.0	70	130	
As	75	2	He	5.136	2.704	3769	1.90	5	102.7	70	130	
Sb	121	2	He	5.263	4.624	18646	3.65	5	105.3	70	130	
Se	78	2	He	5.139	10.903	540	8.99	5	102.8	70	130	
Ti	47	2	He	4.884	5.105	1257	5.59	5	97.7	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1240836	0.65	1242233	99.89	70	120	
In	115	1	nogas	1349508	0.99	1329984	101.47	70	120	
Li	6	1	nogas	1015414	0.60	1019193	99.63	70	120	
Bi	209	1	nogas	1173745	7.11	1120972	104.71	70	120	
Ge	72	2	He	469572	0.95	464162	101.17	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	277_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:01:49-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	97.729	1.395	485310	1.60	100	97.7	90	110	
B	11	1	nogas	492.682	1.435	1475023	1.64	500	98.5	90	110	
Al	27	1	nogas	104.306	0.289	1247987	2.25	100	104.3	90	110	
P	31	1	nogas	564.773	2.010	62772	1.36	500	113.0	90	110	ICV Main CR1 Failed
Ti	47	1	nogas	103.082	0.533	115484	2.05	100	103.1	90	110	
Ni	60	1	nogas	101.304	0.193	305112	2.23	100	101.3	90	110	
Cu	63	1	nogas	101.853	0.502	721898	2.13	100	101.9	90	110	
Zn	66	1	nogas	100.724	0.784	206059	3.20	100	100.7	90	110	
Se	77	1	nogas	87.215	3.829	12399	0.20	100	87.2	90	110	ICV Main CR1 Failed
Se	82	1	nogas	96.478	2.407	11511	3.01	100	96.5	90	110	
Sr	88	1	nogas	91.314	1.392	1766543	2.49	100	91.3	90	110	
Mo	95	1	nogas	101.096	2.012	377674	2.68	100	101.1	90	110	
Ag	107	1	nogas	101.903	2.074	875278	3.00	100	101.9	90	110	
Cd	111	1	nogas	100.679	2.124	181292	3.51	100	100.7	90	110	
Sn	118	1	nogas	100.110	2.205	541353	3.44	100	100.1	90	110	
Sb	121	1	nogas	96.041	1.043	678931	3.36	100	96.0	90	110	
Ba	137	1	nogas	100.676	2.018	258182	3.50	100	100.7	90	110	
Tl	205	1	nogas	95.854	4.909	1482213	4.01	100	95.9	90	110	
Pb	208	1	nogas	101.075	5.437	2025890	4.46	100	101.1	90	110	
U	238	1	nogas	85.610	5.074	2242354	4.18	100	85.6	90	110	ICV Main CR1 Failed
Li	7	1	nogas	97.956	1.188	1738240	1.36	100	98.0	90	110	
Ba	135	1	nogas	101.522	2.928	148523	3.82	100	101.5	90	110	
Tl	203	1	nogas	101.381	5.327	625237	4.32	100	101.4	90	110	
Na	23	2	He	10510.184	0.632	20222845	0.03	10000	105.1	90	110	
Mg	24	2	He	10367.242	0.801	11545028	1.32	10000	103.7	90	110	
Al	27	2	He	104.210	1.226	78302	0.86	100	104.2	90	110	
K	39	2	He	10318.934	0.352	13637113	0.95	10000	103.2	90	110	
Ca	43	2	He	10157.121	4.048	32368	3.43	10000	101.6	90	110	
Ca	44	2	He	10173.519	0.739	533945	1.32	10000	101.7	90	110	
V	51	2	He	102.694	0.962	537188	0.61	100	102.7	90	110	
Cr	52	2	He	102.647	0.721	556650	0.52	100	102.6	90	110	
Mn	55	2	He	102.024	1.262	482146	0.66	100	102.0	90	110	
Fe	56	2	He	10335.090	1.801	58882379	1.26	10000	103.4	90	110	
Co	59	2	He	102.854	1.111	657832	0.72	100	102.9	90	110	
Ni	60	2	He	101.774	0.356	154908	0.27	100	101.8	90	110	
Cu	63	2	He	102.892	1.135	380572	0.60	100	102.9	90	110	
Zn	66	2	He	102.275	2.108	90482	1.97	100	102.3	90	110	
As	75	2	He	102.340	1.101	70553	1.03	100	102.3	90	110	
Sb	121	2	He	100.217	0.735	349716	0.66	100	100.2	90	110	
Se	78	2	He	102.481	2.616	8372	1.99	100	102.5	90	110	
Ti	47	2	He	102.972	1.619	26607	1.60	100	103.0	90	110	

QC ISTD Table

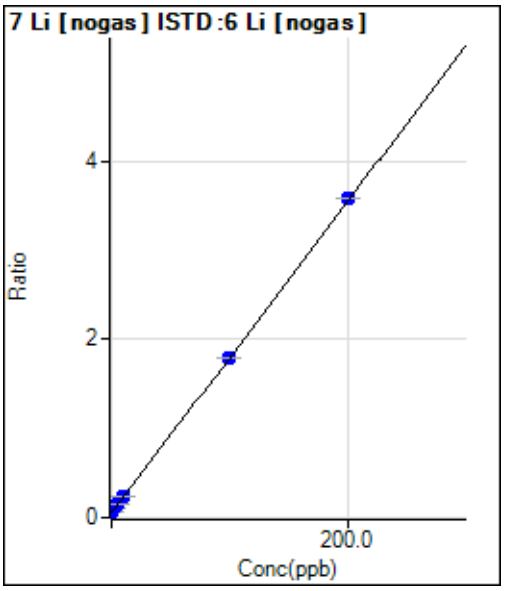
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1298319	2.42	1242233	104.51	70	120	
In	115	1	nogas	1388697	2.05	1329984	104.41	70	120	
Li	6	1	nogas	974750	0.23	1019193	95.64	70	120	
Bi	209	1	nogas	1187052	1.36	1120972	105.89	70	120	
Ge	72	2	He	475225	0.60	464162	102.38	70	120	

Calibration for 277_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 10:02:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	267CALB.d	CAL BLK	8/4/2023 9:40:48 PM
2	268CALS.d	2/10/200	8/4/2023 9:42:51 PM
3	269CALS.d	5/25/500	8/4/2023 9:44:54 PM
4	270CALS.d	10/50/1000	8/4/2023 9:46:58 PM
5	271CALS.d	100/500/10K	8/4/2023 9:49:02 PM
6	272CALS.d	200/1000/20K	8/4/2023 9:51:05 PM
7			

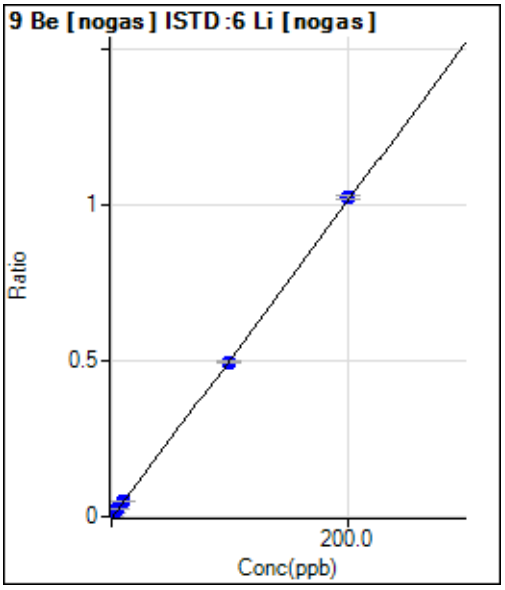
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	72235.98	0.0709	P	1.4	
2	☐	2.000	1.919	106105.85	0.1044	P	0.9	-4.0
3	☐	5.000	4.642	154599.31	0.1520	P	0.6	-7.2
4	☐	10.000	9.363	238160.22	0.2346	P	0.3	-6.4
5	☐	100.000	98.271	1746894.61	1.7887	P	0.6	-1.7
6	☐	200.000	200.906	3321127.45	3.5829	P	0.5	0.5
7	☐	1.000						

y = 0.0175 * x + 0.0709
R = 0.9999
DL = 0.1646 ppb
BEC = 4.055 ppb

Weight: <None>
Min Conc: <None>

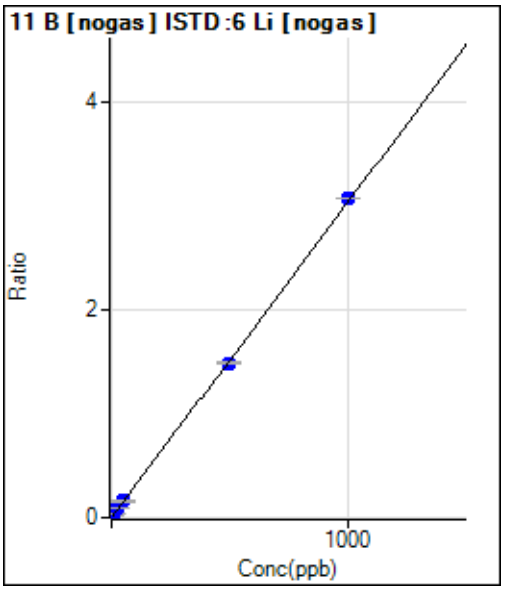


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	31.67	0.0000	P	8.8	
2	☐	2.000	1.869	9704.77	0.0096	P	1.1	-6.6
3	☐	5.000	4.606	23888.41	0.0235	P	1.8	-7.9
4	☐	10.000	9.246	47856.46	0.0471	P	0.8	-7.5
5	☐	100.000	97.462	484890.70	0.4965	P	0.9	-2.5
6	☐	200.000	201.318	950659.07	1.0256	P	0.6	0.7
7	☐	1.000						

y = 0.0051 * x + 3.1065E-005
R = 0.9999
DL = 0.00161 ppb
BEC = 0.006098 ppb

Weight: <None>
Min Conc: <None>

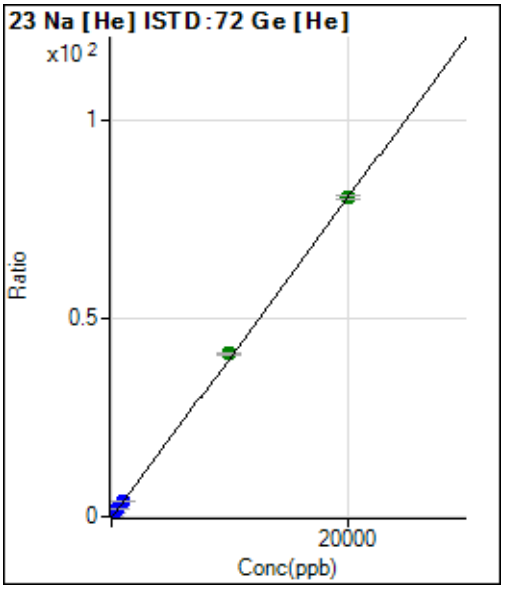
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18929.94	0.0186	P	1.3	
2	☐	10.000	8.988	46577.79	0.0458	P	1.2	-10.1
3	☐	25.000	22.445	88127.75	0.0867	P	1.4	-10.2
4	☐	50.000	45.899	160234.73	0.1578	P	1.0	-8.2
5	☐	500.000	484.585	1453897.95	1.4886	P	1.6	-3.1
6	☐	1000.000	1007.986	2851901.42	3.0765	P	0.5	0.8
7	☐	5.000						

y = 0.0030 * x + 0.0186
R = 0.9998
DL = 0.2406 ppb
BEC = 6.123 ppb

Weight: <None>
Min Conc: <None>

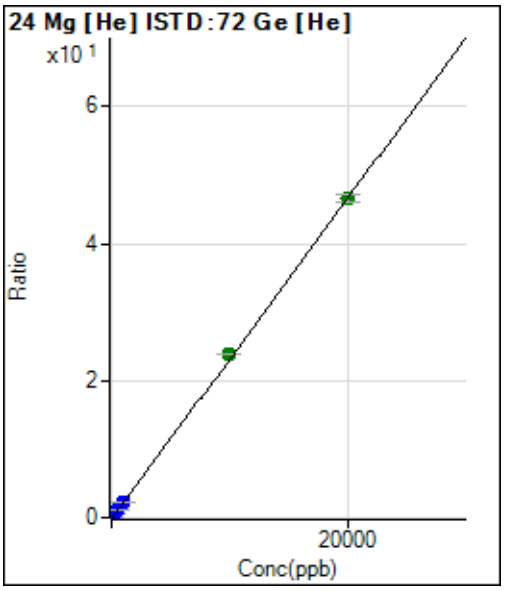


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43989.63	0.0948	P	1.3	
2	☐	200.000	193.057	408418.26	0.8747	P	0.6	-3.5
3	☐	500.000	473.326	942210.51	2.0070	P	0.4	-5.3
4	☐	1000.000	937.750	1856720.28	3.8832	P	0.3	-6.2
5	☐	10000.00	10151.19	19815026.37	41.1051	A	1.5	1.5
6	☐	20000.00	19928.24	38875996.92	80.6038	A	0.6	-0.4
7	☐	100.000						

y = 0.0040 * x + 0.0948
R = 1.0000
DL = 0.9354 ppb
BEC = 23.46 ppb

Weight: <None>
Min Conc: <None>

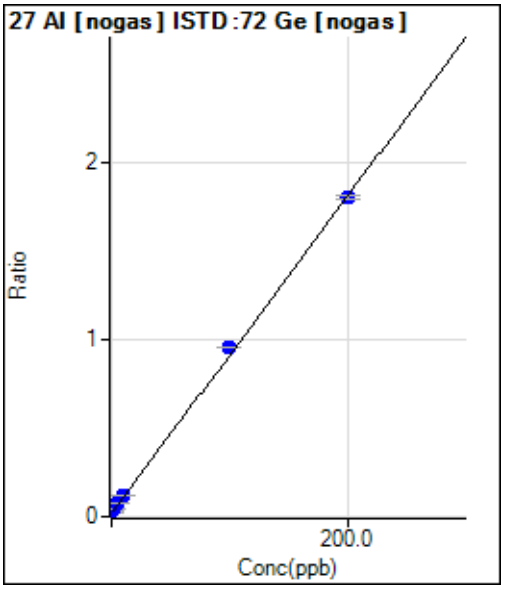
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	666.69	0.0014	P	9.7	
2	☐	200.000	191.582	210274.94	0.4503	P	0.7	-4.2
3	☐	500.000	469.657	517288.72	1.1019	P	0.7	-6.1
4	☐	1000.000	926.985	1039198.19	2.1735	P	0.9	-7.3
5	☐	10000.00	10216.08	11541071.50	23.9390	A	0.5	2.2
6	☐	20000.00	19896.45	22486236.33	46.6214	A	1.9	-0.5
7	☐	100.000						

y = 0.0023 * x + 0.0014
R = 0.9999
DL = 0.1787 ppb
BEC = 0.6126 ppb

Weight: <None>
Min Conc: <None>

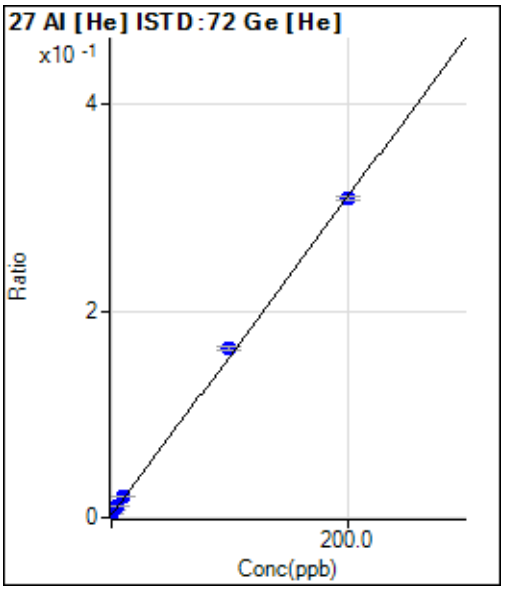


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	34089.35	0.0275	P	19.	
2	☐	2.000	1.840	54747.42	0.0439	P	1.2	-8.0
3	☐	5.000	4.969	89700.38	0.0719	P	1.2	-0.6
4	☐	10.000	10.446	151987.49	0.1210	P	1.6	4.5
5	☐	100.000	103.771	1247283.55	0.9565	P	0.2	3.8
6	☐	200.000	198.095	2337278.40	1.8009	P	1.5	-1.0
7	☐	1.000						

y = 0.0090 * x + 0.0275
R = 0.9997
DL = 1.809 ppb
BEC = 3.068 ppb

Weight: <None>
Min Conc: <None>

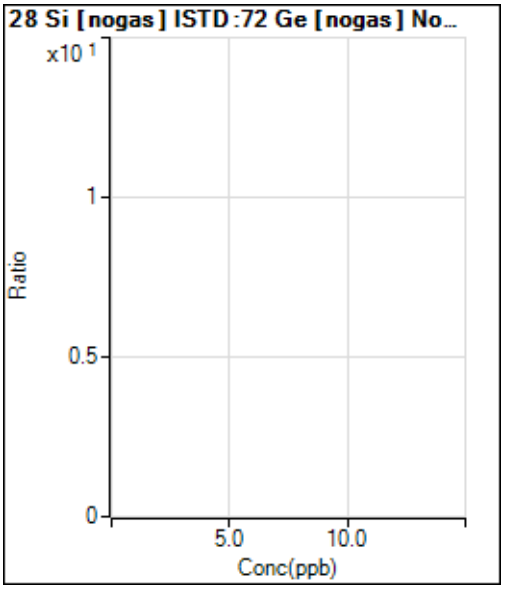
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1876.82	0.0040	P	12.	
2	☐	2.000	2.297	3543.80	0.0076	P	7.0	14.8
3	☐	5.000	4.808	5381.03	0.0115	P	1.8	-3.8
4	☐	10.000	10.886	9963.37	0.0208	P	2.1	8.9
5	☐	100.000	104.019	79287.91	0.1645	P	1.9	4.0
6	☐	200.000	197.948	149201.20	0.3094	P	1.0	-1.0
7	☐	1.000						

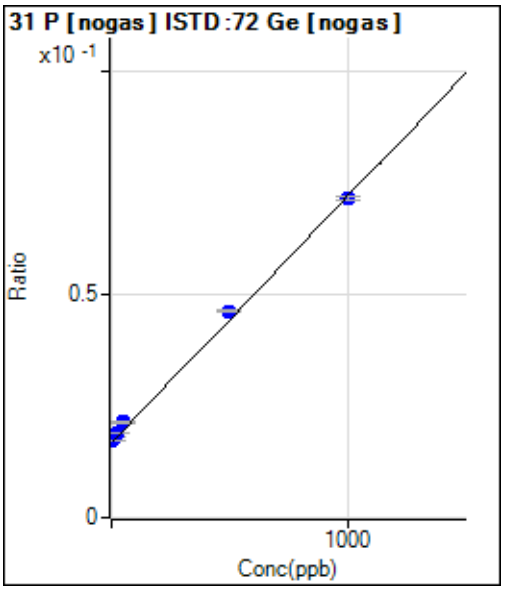
y = 0.0015 * x + 0.0040
R = 0.9997
DL = 0.9773 ppb
BEC = 2.623 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

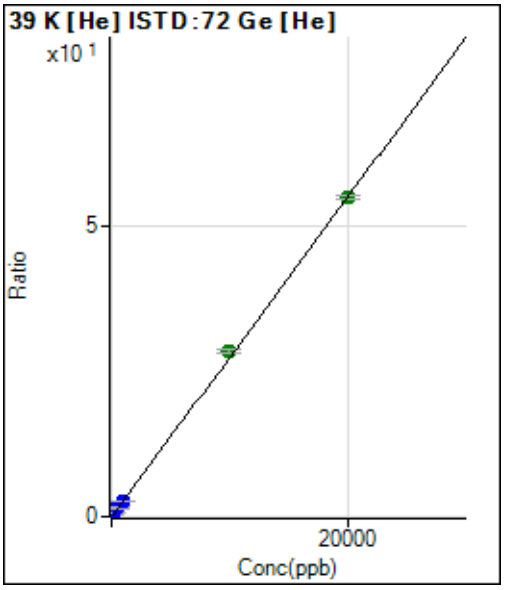
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21381.88	0.0172	P	2.0	
2	☐	10.000	9.396	22082.86	0.0177	P	4.8	-6.0
3	☐	25.000	31.006	23588.51	0.0189	P	1.6	24.0
4	☐	50.000	75.878	26882.01	0.0214	P	0.7	51.8
5	☐	500.000	527.136	60345.60	0.0463	P	0.6	5.4
6	☐	1000.000	984.994	92850.21	0.0715	P	0.9	-1.5
7	☐	5.000						

y = 5.5150E-005 * x + 0.0172
R = 0.9993
DL = 18.51 ppb
BEC = 312.1 ppb

Weight: <None>
Min Conc: <None>

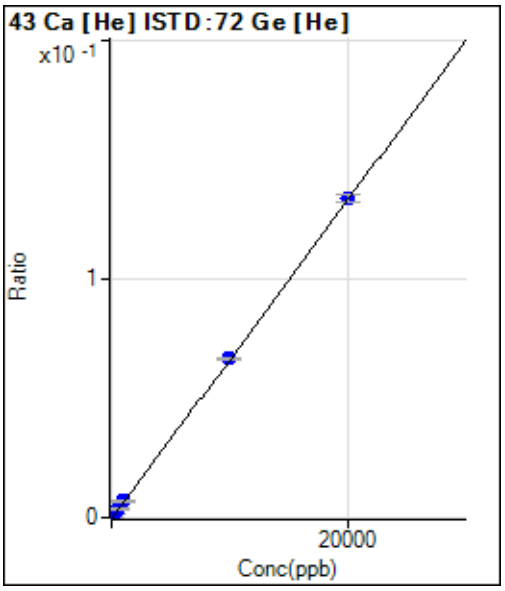


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	111020.85	0.2392	P	1.1	
2	☐	200.000	185.557	350613.16	0.7509	P	0.1	-7.2
3	☐	500.000	455.367	701825.12	1.4950	P	0.7	-8.9
4	☐	1000.000	895.879	1295594.95	2.7098	P	1.2	-10.4
5	☐	10000.00	10242.56	13731372.71	28.4851	A	1.8	2.4
6	☐	20000.00	19885.18	26563005.44	55.0766	A	1.2	-0.6
7	☐	100.000						

y = 0.0028 * x + 0.2392
R = 0.9999
DL = 2.878 ppb
BEC = 86.74 ppb

Weight: <None>
Min Conc: <None>

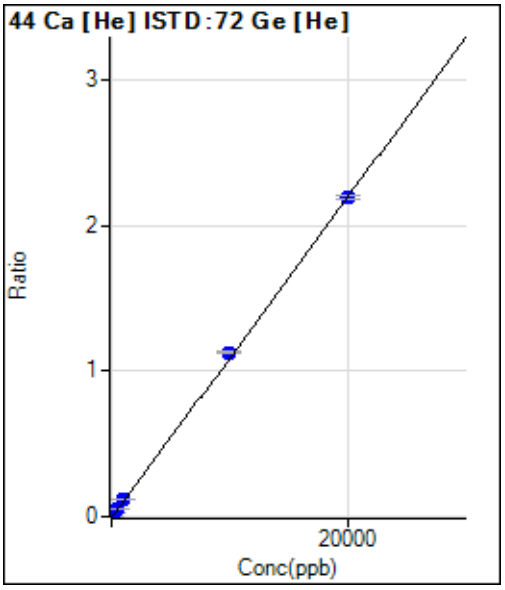
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	45.	
2	☐	200.000	208.819	686.69	0.0015	P	7.1	4.4
3	☐	500.000	525.573	1686.79	0.0036	P	4.1	5.1
4	☐	1000.000	1028.916	3330.43	0.0070	P	4.4	2.9
5	☐	10000.00	9985.817	32288.12	0.0670	P	1.1	-0.1
6	☐	20000.00	20004.91	64680.77	0.1341	P	2.6	0.0
7	☐	100.000						

y = 6.6998E-006 * x + 7.1641E-005
R = 1.0000
DL = 14.49 ppb
BEC = 10.69 ppb

Weight: <None>
Min Conc: <None>

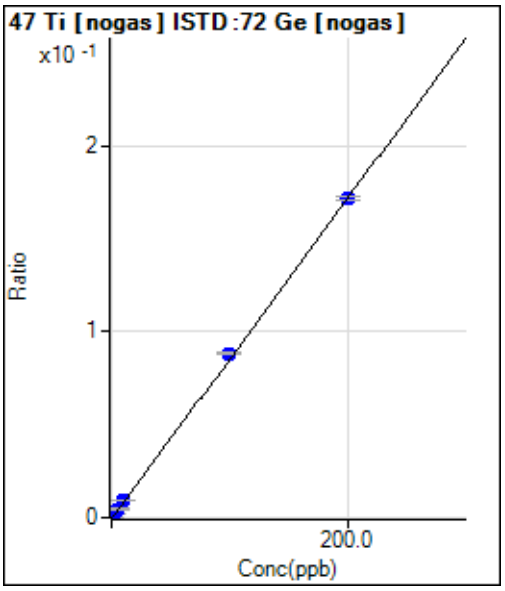


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0017	P	2.7	
2	☐	200.000	207.646	11494.56	0.0246	P	2.2	3.8
3	☐	500.000	520.751	27765.89	0.0591	P	0.8	4.2
4	☐	1000.000	1027.409	54989.62	0.1150	P	1.7	2.7
5	☐	10000.00	10201.25	543091.01	1.1266	P	1.3	2.0
6	☐	20000.00	19897.40	1059034.78	2.1958	P	0.8	-0.5
7	☐	100.000						

y = 1.1027E-004 * x + 0.0017
R = 0.9999
DL = 1.257 ppb
BEC = 15.63 ppb

Weight: <None>
Min Conc: <None>

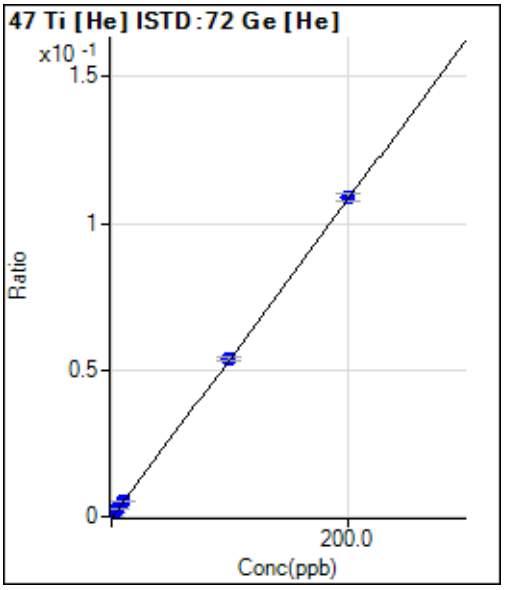
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	163.34	0.0001	P	24.	
2	☐	2.000	2.012	2323.55	0.0019	P	8.3	0.6
3	☐	5.000	5.146	5691.20	0.0046	P	3.8	2.9
4	☐	10.000	10.279	11294.37	0.0090	P	2.5	2.8
5	☐	100.000	102.011	114781.37	0.0880	P	1.3	2.0
6	☐	200.000	198.977	222668.00	0.1716	P	1.8	-0.5
7	☐	1.000						

y = 8.6167E-004 * x + 1.3151E-004
R = 0.9999
DL = 0.1142 ppb
BEC = 0.1526 ppb

Weight: <None>
Min Conc: <None>

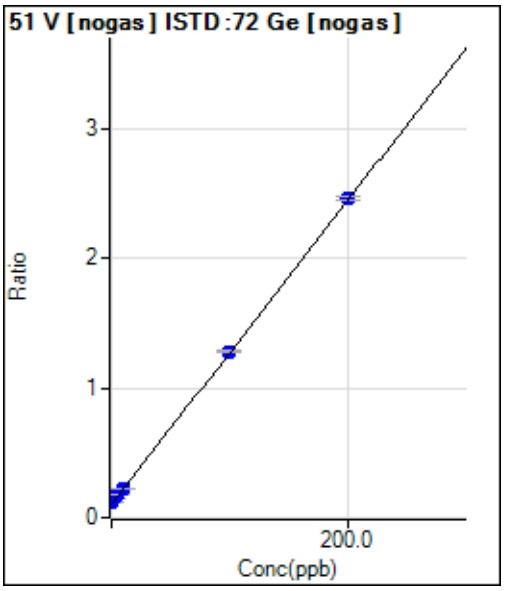


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	1.1	
2	☐	2.000	2.233	576.69	0.0012	P	29.	11.7
3	☐	5.000	5.173	1330.08	0.0028	P	0.9	3.5
4	☐	10.000	9.724	2536.92	0.0053	P	8.7	-2.8
5	☐	100.000	99.167	25992.60	0.0539	P	2.1	-0.8
6	☐	200.000	200.423	52548.16	0.1090	P	2.3	0.2
7	☐	1.000						

y = 5.4352E-004 * x + 2.1546E-005
R = 1.0000
DL = 0.001255 ppb
BEC = 0.03964 ppb

Weight: <None>
Min Conc: <None>

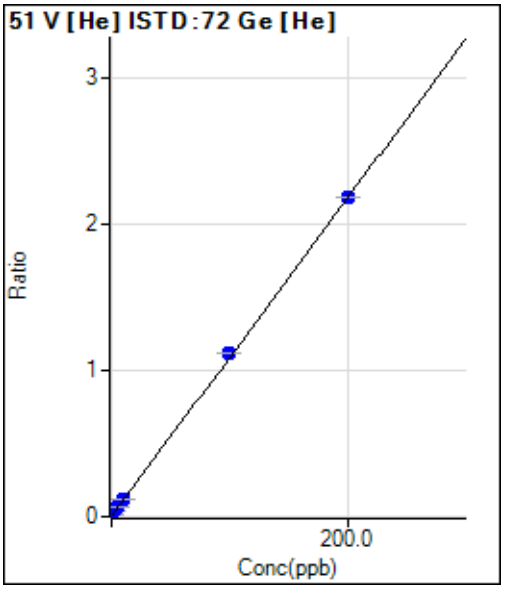
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143612.65	0.1156	P	1.5	
2	☐	2.000	2.313	177857.83	0.1428	P	1.3	15.7
3	☐	5.000	4.940	216416.21	0.1736	P	1.3	-1.2
4	☐	10.000	9.419	284125.38	0.2262	P	1.1	-5.8
5	☐	100.000	99.348	1670690.65	1.2815	P	1.5	-0.7
6	☐	200.000	200.353	3201687.24	2.4669	P	1.2	0.2
7	☐	1.000						

y = 0.0117 * x + 0.1156
R = 1.0000
DL = 0.4533 ppb
BEC = 9.851 ppb

Weight: <None>
Min Conc: <None>

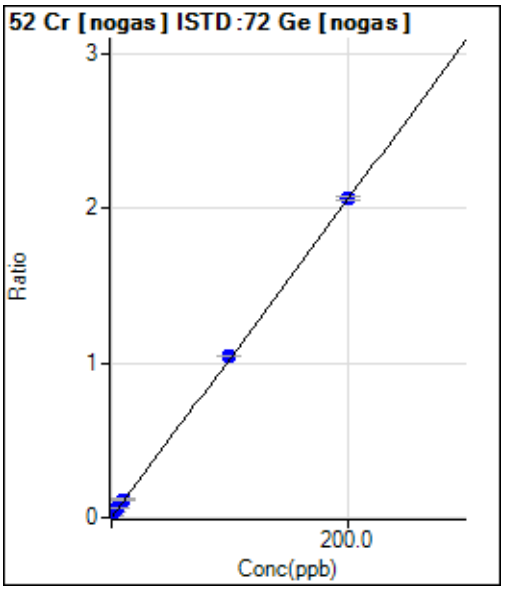


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6394.72	0.0138	P	3.0	
2	☐	2.000	2.102	17106.36	0.0366	P	0.8	5.1
3	☐	5.000	4.951	31740.93	0.0676	P	1.8	-1.0
4	☐	10.000	9.848	57788.56	0.1209	P	1.2	-1.5
5	☐	100.000	101.457	538470.81	1.1170	P	0.9	1.5
6	☐	200.000	199.279	1051733.47	2.1806	P	0.4	-0.4
7	☐	1.000						

y = 0.0109 * x + 0.0138
R = 1.0000
DL = 0.1155 ppb
BEC = 1.267 ppb

Weight: <None>
Min Conc: <None>

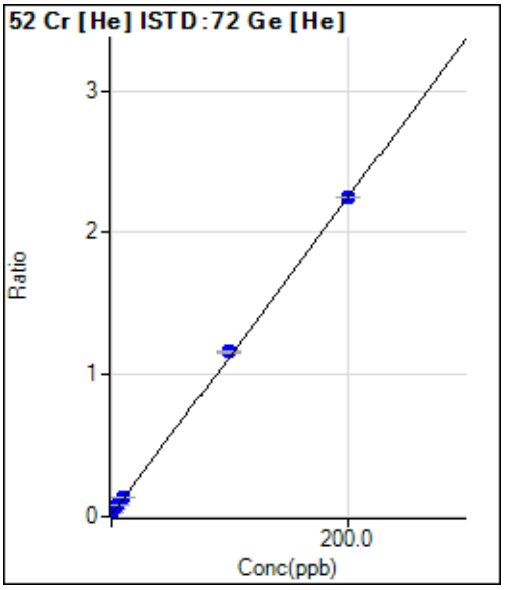
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13943.34	0.0112	P	1.7	
2	☐	2.000	2.140	41396.92	0.0332	P	1.0	7.0
3	☐	5.000	5.131	79759.70	0.0640	P	2.0	2.6
4	☐	10.000	10.300	147128.89	0.1171	P	2.3	3.0
5	☐	100.000	100.638	1363573.10	1.0457	P	0.4	0.6
6	☐	200.000	199.661	2678572.61	2.0637	P	0.9	-0.2
7	☐	1.000						

y = 0.0103 * x + 0.0112
R = 1.0000
DL = 0.0563 ppb
BEC = 1.092 ppb

Weight: <None>
Min Conc: <None>

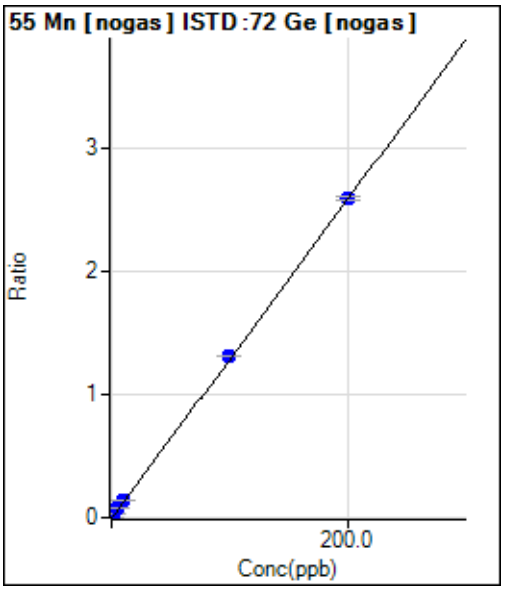


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11521.26	0.0248	P	4.0	
2	☐	2.000	2.273	23441.79	0.0502	P	0.1	13.7
3	☐	5.000	5.085	38315.42	0.0816	P	2.4	1.7
4	☐	10.000	10.253	66629.92	0.1393	P	1.3	2.5
5	☐	100.000	101.749	559862.15	1.1613	P	0.9	1.7
6	☐	200.000	199.108	1084604.38	2.2488	P	0.5	-0.4
7	☐	1.000						

y = 0.0112 * x + 0.0248
R = 0.9999
DL = 0.2638 ppb
BEC = 2.222 ppb

Weight: <None>
Min Conc: <None>

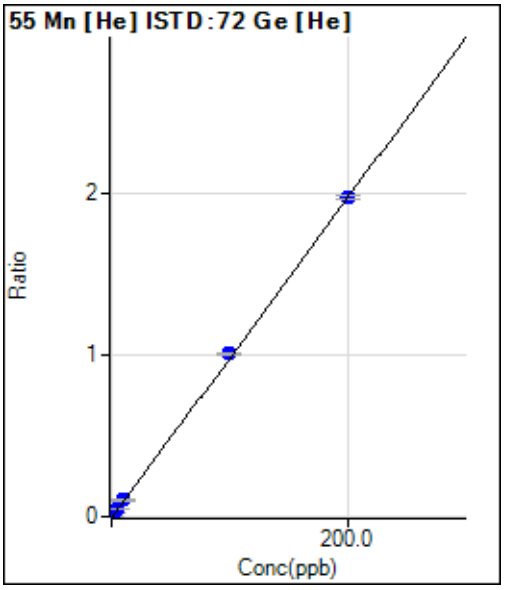
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5824.55	0.0047	P	4.8	
2	☐	2.000	2.110	40039.95	0.0321	P	2.0	5.5
3	☐	5.000	5.162	89554.35	0.0718	P	1.0	3.2
4	☐	10.000	10.363	175221.41	0.1395	P	2.0	3.6
5	☐	100.000	100.875	1716706.95	1.3167	P	0.7	0.9
6	☐	200.000	199.539	3374570.16	2.5999	P	1.0	-0.2
7	☐	1.000						

y = 0.0130 * x + 0.0047
R = 1.0000
DL = 0.05196 ppb
BEC = 0.3605 ppb

Weight: <None>
Min Conc: <None>

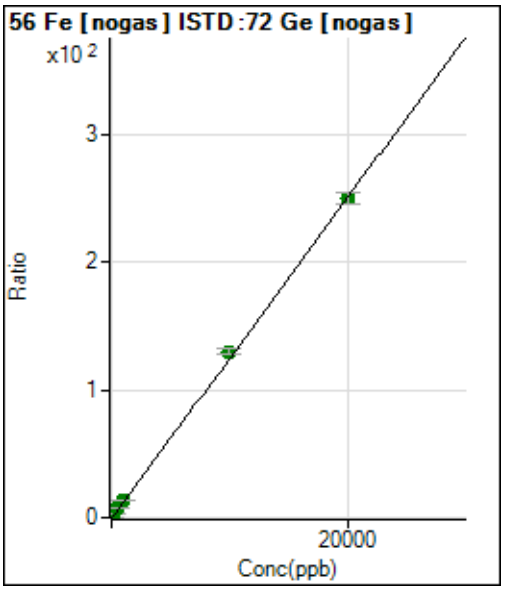


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0010	P	1.2	
2	☐	2.000	2.094	10170.26	0.0218	P	3.8	4.7
3	☐	5.000	5.130	24383.33	0.0519	P	2.0	2.6
4	☐	10.000	10.161	48742.44	0.1019	P	2.7	1.6
5	☐	100.000	101.482	486583.89	1.0092	P	0.4	1.5
6	☐	200.000	199.247	955225.33	1.9806	P	0.7	-0.4
7	☐	1.000						

y = 0.0099 * x + 9.7674E-004
R = 1.0000
DL = 0.003514 ppb
BEC = 0.09831 ppb

Weight: <None>
Min Conc: <None>

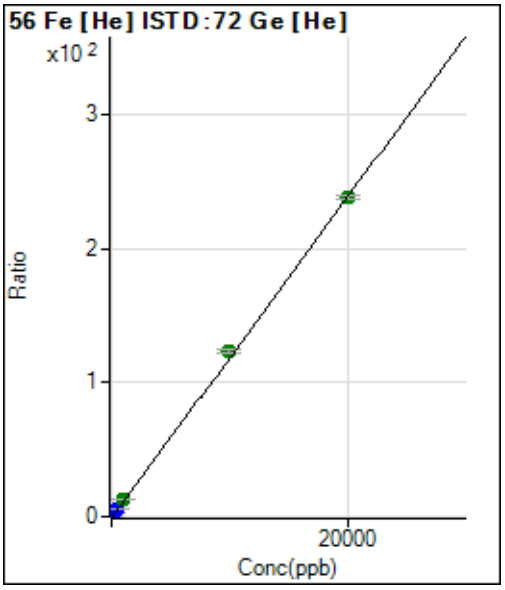
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	599942.20	0.4829	P	0.5	
2	☐	200.000	231.437	4225232.96	3.3913	A	1.0	15.7
3	☐	500.000	557.018	9329005.49	7.4828	A	1.9	11.4
4	☐	1000.000	1083.899	17719908.90	14.1039	A	0.6	8.4
5	☐	10000.00	10305.94	169390247.4	129.993	A	3.6	3.1
6	☐	20000.00	19841.09	324059628.5	249.817	A	3.3	-0.8
7	☐	100.000						

y = 0.0126 * x + 0.4829
R = 0.9998
DL = 0.5714 ppb
BEC = 38.43 ppb

Weight: <None>
Min Conc: <None>

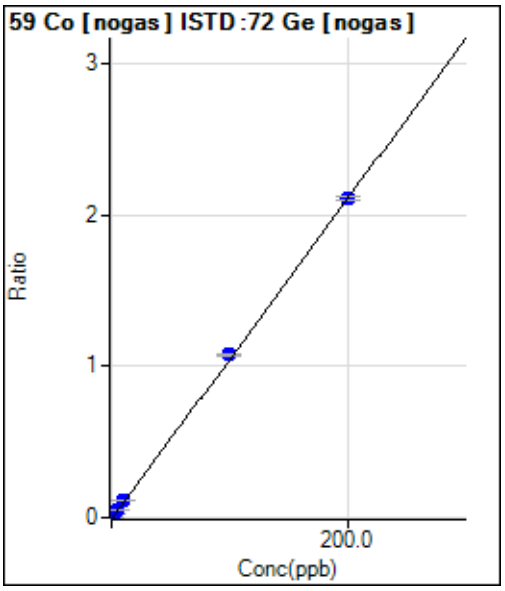


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19283.14	0.0415	P	2.4	
2	☐	200.000	183.416	1045831.65	2.2399	P	0.1	-8.3
3	☐	500.000	447.083	2535024.34	5.4000	P	1.7	-10.6
4	☐	1000.000	1067.836	6139400.53	12.8401	A	1.2	6.8
5	☐	10000.00	10263.59	59318889.12	123.055	A	2.0	2.6
6	☐	20000.00	19866.30	114857451.6	238.148	A	1.5	-0.7
7	☐	100.000						

y = 0.0120 * x + 0.0415
R = 0.9999
DL = 0.2482 ppb
BEC = 3.466 ppb

Weight: <None>
Min Conc: <None>

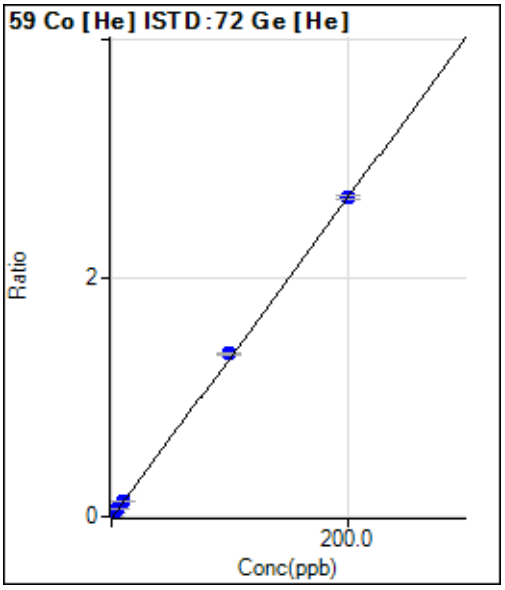
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	38.	
2	☐	2.000	2.068	27455.29	0.0220	P	1.9	3.4
3	☐	5.000	5.203	68954.55	0.0553	P	0.5	4.1
4	☐	10.000	10.343	138014.74	0.1098	P	1.4	3.4
5	☐	100.000	101.699	1407179.35	1.0793	P	0.9	1.7
6	☐	200.000	199.127	2742944.54	2.1132	P	0.8	-0.4
7	☐	1.000						

y = 0.0106 * x + 8.6050E-005
R = 1.0000
DL = 0.009354 ppb
BEC = 0.008109 ppb

Weight: <None>
Min Conc: <None>

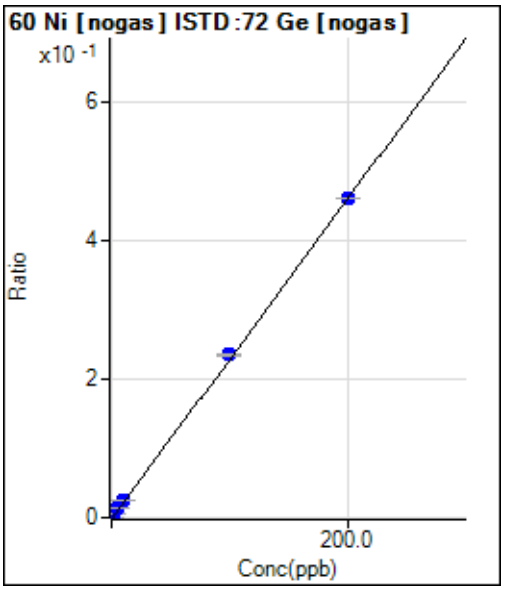


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	68.	
2	☐	2.000	2.065	12992.46	0.0278	P	3.7	3.3
3	☐	5.000	5.217	32973.01	0.0702	P	3.0	4.3
4	☐	10.000	9.956	64079.58	0.1340	P	2.0	-0.4
5	☐	100.000	101.454	658258.18	1.3655	P	1.0	1.5
6	☐	200.000	199.269	1293478.81	2.6819	P	1.7	-0.4
7	☐	1.000						

y = 0.0135 * x + 3.5819E-005
R = 1.0000
DL = 0.005485 ppb
BEC = 0.002661 ppb

Weight: <None>
Min Conc: <None>

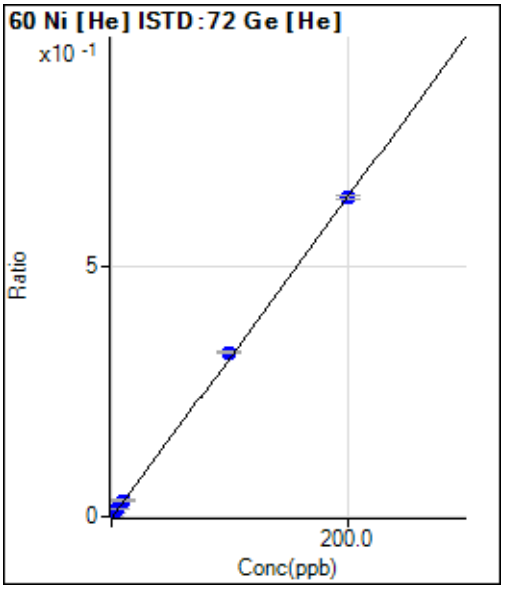
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.67	0.0003	P	29.	
2	☐	2.000	2.058	6258.09	0.0050	P	2.4	2.9
3	☐	5.000	5.318	15685.09	0.0126	P	0.9	6.4
4	☐	10.000	10.451	30745.16	0.0245	P	3.6	4.5
5	☐	100.000	101.532	307138.77	0.2355	P	0.5	1.5
6	☐	200.000	199.203	599566.32	0.4619	P	0.6	-0.4
7	☐	1.000						

y = 0.0023 * x + 2.5458E-004
R = 1.0000
DL = 0.09636 ppb
BEC = 0.1099 ppb

Weight: <None>
Min Conc: <None>

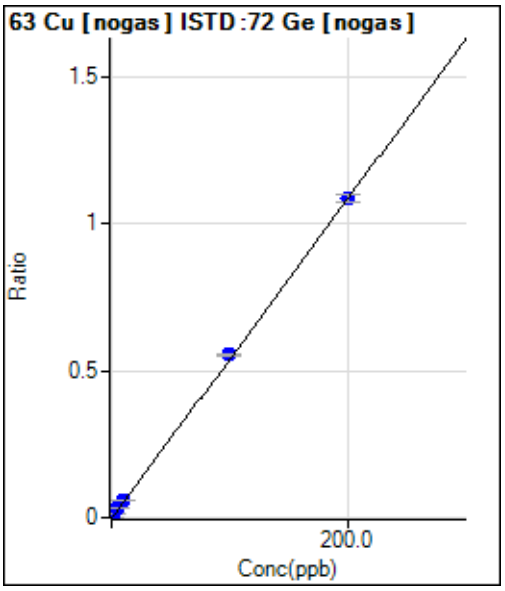


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	25.	
2	☐	2.000	2.206	3447.12	0.0074	P	0.7	10.3
3	☐	5.000	5.250	8038.96	0.0171	P	1.2	5.0
4	☐	10.000	10.043	15518.21	0.0325	P	3.0	0.4
5	☐	100.000	102.349	158044.05	0.3278	P	1.2	2.3
6	☐	200.000	198.815	306970.06	0.6365	P	0.9	-0.6
7	☐	1.000						

y = 0.0032 * x + 3.2371E-004
R = 0.9999
DL = 0.0763 ppb
BEC = 0.1012 ppb

Weight: <None>
Min Conc: <None>

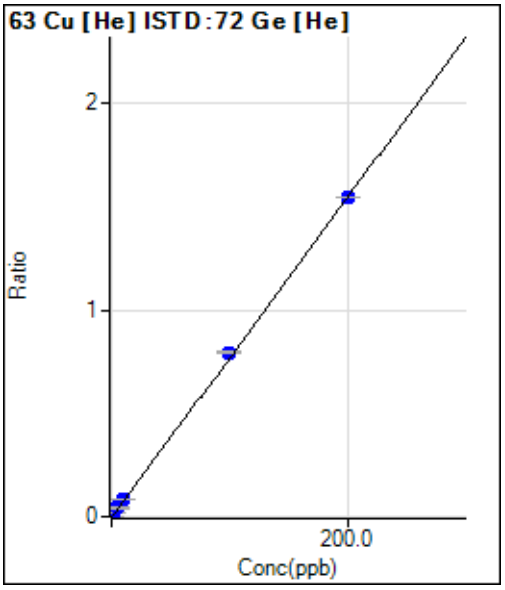
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2380.22	0.0019	P	6.2	
2	☐	2.000	1.957	15648.35	0.0126	P	2.5	-2.2
3	☐	5.000	5.088	36905.59	0.0296	P	0.7	1.8
4	☐	10.000	10.509	74243.17	0.0591	P	0.8	5.1
5	☐	100.000	101.300	721249.54	0.5531	P	0.5	1.3
6	☐	200.000	199.323	1409706.96	1.0864	P	1.9	-0.3
7	☐	1.000						

y = 0.0054 * x + 0.0019
R = 1.0000
DL = 0.06534 ppb
BEC = 0.3521 ppb

Weight: <None>
Min Conc: <None>

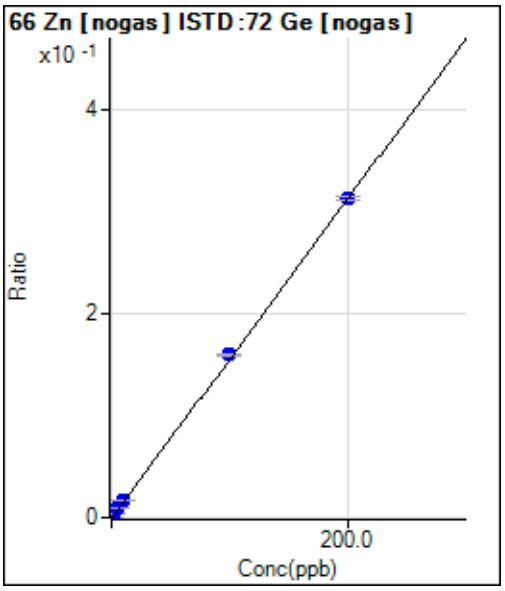


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1316.76	0.0028	P	1.7	
2	☐	2.000	2.008	8595.95	0.0184	P	3.0	0.4
3	☐	5.000	5.127	20000.25	0.0426	P	4.1	2.5
4	☐	10.000	10.250	39368.65	0.0823	P	1.0	2.5
5	☐	100.000	102.120	383213.65	0.7949	P	0.4	2.1
6	☐	200.000	198.924	745484.52	1.5457	P	0.1	-0.5
7	☐	1.000						

y = 0.0078 * x + 0.0028
R = 0.9999
DL = 0.01887 ppb
BEC = 0.3658 ppb

Weight: <None>
Min Conc: <None>

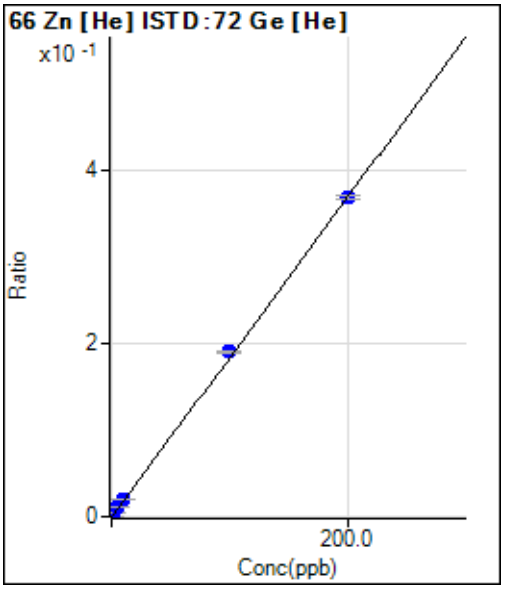
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	890.04	0.0007	P	6.6	
2	☐	2.000	2.192	5174.31	0.0042	P	4.1	9.6
3	☐	5.000	5.277	11214.40	0.0090	P	3.9	5.5
4	☐	10.000	10.388	21372.15	0.0170	P	0.9	3.9
5	☐	100.000	101.323	208167.25	0.1596	P	0.7	1.3
6	☐	200.000	199.310	406635.67	0.3133	P	1.4	-0.3
7	☐	1.000						

y = 0.0016 * x + 7.1645E-004
R = 1.0000
DL = 0.09071 ppb
BEC = 0.4568 ppb

Weight: <None>
Min Conc: <None>

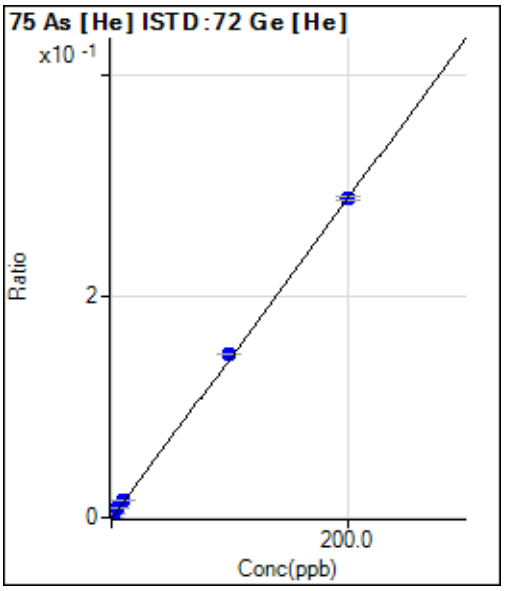


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	400.01	0.0009	P	1.7	
2	☐	2.000	2.055	2180.20	0.0047	P	8.4	2.8
3	☐	5.000	5.130	4867.54	0.0104	P	1.0	2.6
4	☐	10.000	10.036	9303.03	0.0195	P	5.4	0.4
5	☐	100.000	102.352	91853.66	0.1905	P	1.7	2.4
6	☐	200.000	198.818	178126.66	0.3693	P	1.1	-0.6
7	☐	1.000						

y = 0.0019 * x + 8.6172E-004
R = 0.9999
DL = 0.02358 ppb
BEC = 0.465 ppb

Weight: <None>
Min Conc: <None>

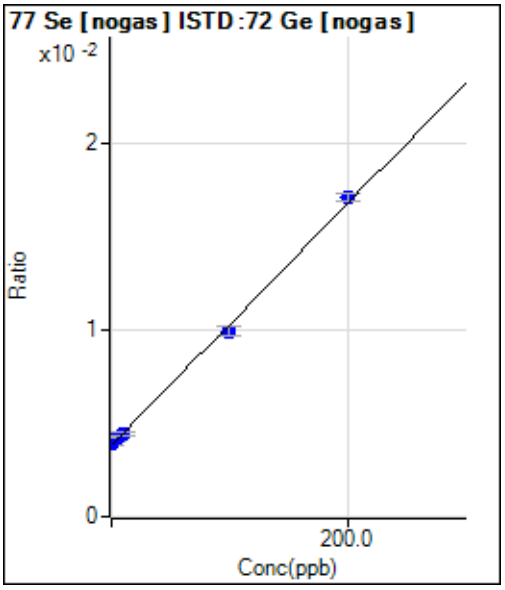
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	282.23	0.0006	P	15.	
2	☐	2.000	2.109	1706.77	0.0037	P	2.9	5.5
3	☐	5.000	5.122	3759.38	0.0080	P	2.0	2.4
4	☐	10.000	10.137	7294.05	0.0153	P	1.4	1.4
5	☐	100.000	101.772	71176.67	0.1476	P	1.0	1.8
6	☐	200.000	199.103	139031.39	0.2883	P	0.6	-0.4
7	☐	1.000						

y = 0.0014 * x + 6.0867E-004
R = 0.9999
DL = 0.2008 ppb
BEC = 0.4213 ppb

Weight: <None>
Min Conc: <None>

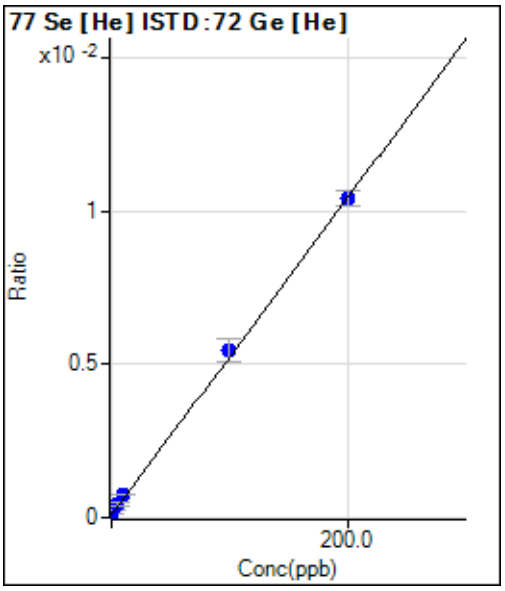


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4870.90	0.0039	P	4.5	
2	☐	2.000	2.735	5107.64	0.0041	P	1.8	36.7
3	☐	5.000	4.941	5287.70	0.0042	P	3.2	-1.2
4	☐	10.000	7.427	5531.12	0.0044	P	4.9	-25.7
5	☐	100.000	92.824	12915.78	0.0099	P	5.2	-7.2
6	☐	200.000	203.711	22156.86	0.0171	P	2.6	1.9
7	☐	1.000						

y = 6.4567E-005 * x + 0.0039
R = 0.9990
DL = 8.277 ppb
BEC = 60.74 ppb

Weight: <None>
Min Conc: <None>

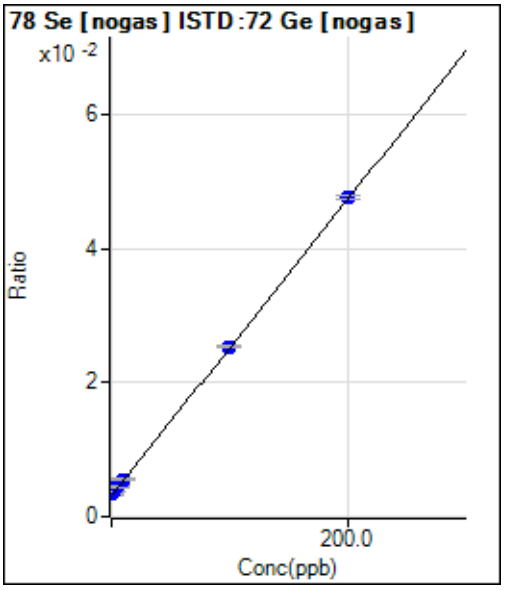
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	23.	
2	☐	2.000	3.427	146.67	0.0003	P	40.	71.3
3	☐	5.000	5.868	206.67	0.0004	P	17.	17.4
4	☐	10.000	11.767	356.68	0.0007	P	2.7	17.7
5	☐	100.000	102.604	2630.27	0.0055	P	13.	2.6
6	☐	200.000	198.574	5027.65	0.0104	P	4.9	-0.7
7	☐	1.000						

y = 5.1808E-005 * x + 1.3628E-004
R = 0.9999
DL = 1.844 ppb
BEC = 2.63 ppb

Weight: <None>
Min Conc: <None>

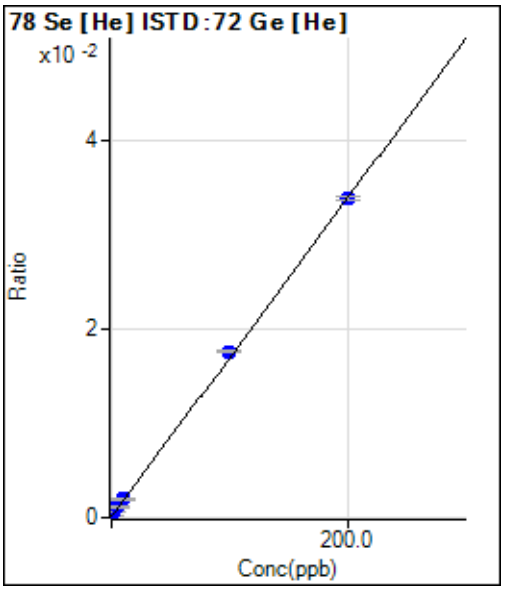


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4190.67	0.0034	P	4.6	
2	☐	2.000	1.866	4717.50	0.0038	P	4.5	-6.7
3	☐	5.000	4.899	5557.79	0.0045	P	6.5	-2.0
4	☐	10.000	9.971	7011.77	0.0056	P	5.9	-0.3
5	☐	100.000	99.530	33150.71	0.0254	P	0.5	-0.5
6	☐	200.000	200.241	61952.60	0.0477	P	1.4	0.1
7	☐	1.000						

y = 2.2154E-004 * x + 0.0034
R = 1.0000
DL = 2.085 ppb
BEC = 15.23 ppb

Weight: <None>
Min Conc: <None>

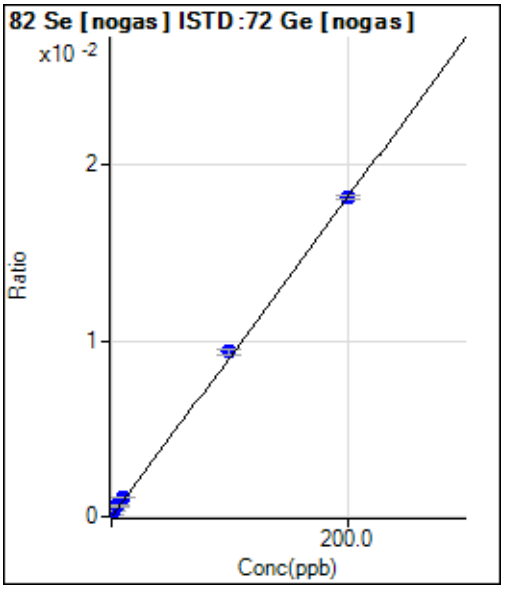
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0003	P	3.8	
2	☐	2.000	2.099	296.67	0.0006	P	6.6	5.0
3	☐	5.000	5.067	534.01	0.0011	P	3.2	1.3
4	☐	10.000	10.029	945.36	0.0020	P	4.0	0.3
5	☐	100.000	102.622	8505.12	0.0176	P	0.9	2.6
6	☐	200.000	198.685	16346.98	0.0339	P	0.8	-0.7
7	☐	1.000						

y = 1.6918E-004 * x + 2.8007E-004
R = 0.9999
DL = 0.1894 ppb
BEC = 1.655 ppb

Weight: <None>
Min Conc: <None>

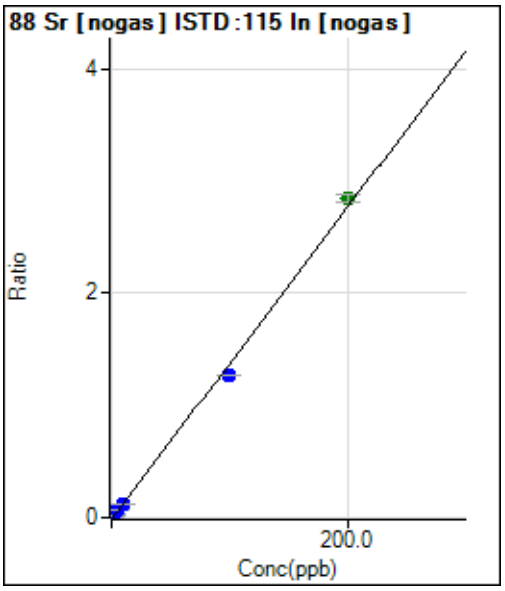


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0001	P	33.	
2	☐	2.000	2.610	400.01	0.0003	P	15.	30.5
3	☐	5.000	5.727	753.37	0.0006	P	6.2	14.5
4	☐	10.000	11.127	1376.76	0.0011	P	4.2	11.3
5	☐	100.000	102.077	12231.93	0.0094	P	3.9	2.1
6	☐	200.000	198.881	23609.05	0.0182	P	1.5	-0.6
7	☐	1.000						

y = 9.1047E-005 * x + 8.3030E-005
R = 0.9999
DL = 0.9068 ppb
BEC = 0.9119 ppb

Weight: <None>
Min Conc: <None>

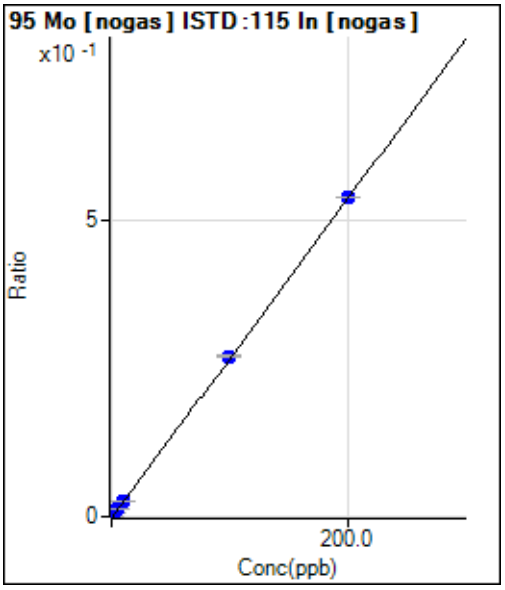
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	410.01	0.0003	P	5.1	
2	☐	2.000	1.840	34544.13	0.0259	P	1.8	-8.0
3	☐	5.000	4.591	86237.86	0.0642	P	1.6	-8.2
4	☐	10.000	9.002	171018.55	0.1257	P	0.6	-10.0
5	☐	100.000	90.975	1762014.92	1.2674	P	0.7	-9.0
6	☐	200.000	204.574	3975639.73	2.8495	A	2.3	2.3
7	☐	1.000						

y = 0.0139 * x + 3.0838E-004
R = 0.9986
DL = 0.003383 ppb
BEC = 0.02214 ppb

Weight: <None>
Min Conc: <None>

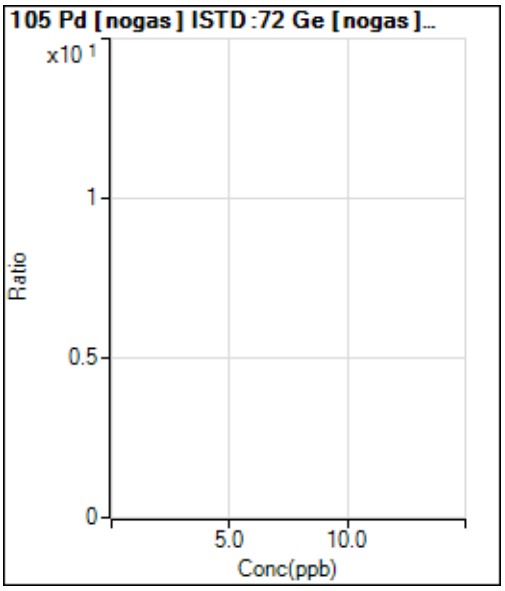


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.68	0.0002	P	13.	
2	☐	2.000	2.030	7515.39	0.0056	P	1.4	1.5
3	☐	5.000	4.899	17927.88	0.0134	P	3.5	-2.0
4	☐	10.000	9.912	36509.02	0.0268	P	0.8	-0.9
5	☐	100.000	100.377	375463.04	0.2700	P	1.5	0.4
6	☐	200.000	199.818	750005.72	0.5374	P	0.5	-0.1
7	☐	1.000						

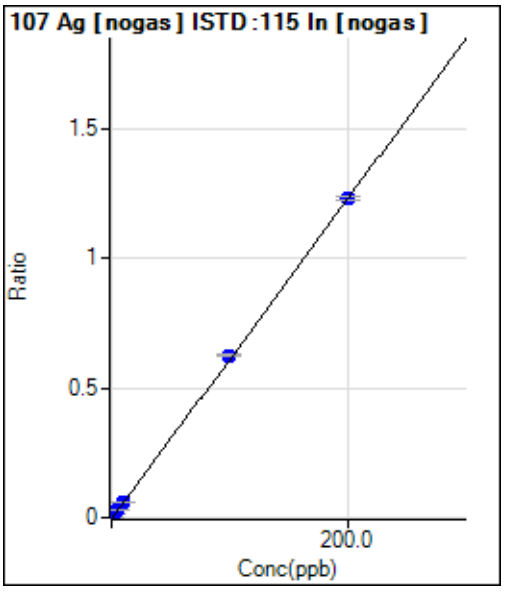
y = 0.0027 * x + 1.8543E-004
R = 1.0000
DL = 0.02871 ppb
BEC = 0.06897 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

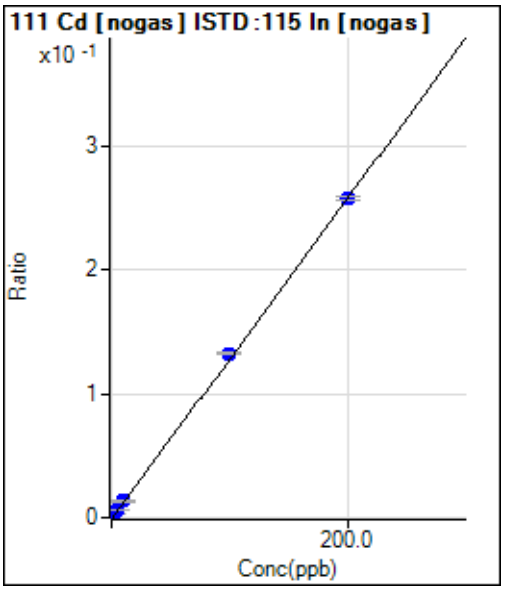


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	13.	
2	☐	2.000	2.089	17330.63	0.0130	P	3.7	4.4
3	☐	5.000	5.105	42505.72	0.0317	P	3.1	2.1
4	☐	10.000	10.027	84504.47	0.0621	P	0.8	0.3
5	☐	100.000	101.372	871928.94	0.6270	P	1.5	1.4
6	☐	200.000	199.309	1720687.99	1.2327	P	1.0	-0.3
7	☐	1.000						

y = 0.0062 * x + 9.5324E-005
R = 1.0000
DL = 0.006033 ppb
BEC = 0.01541 ppb

Weight: <None>
Min Conc: <None>

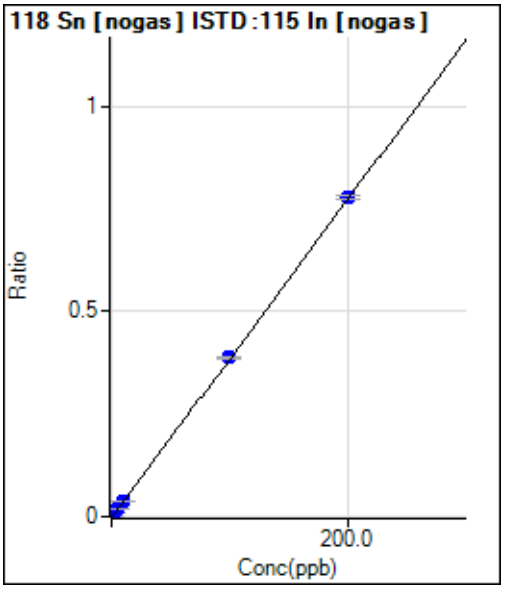
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.978	3417.14	0.0026	P	7.2	-1.1
3	☐	5.000	5.024	8742.76	0.0065	P	3.1	0.5
4	☐	10.000	10.265	18108.21	0.0133	P	2.2	2.7
5	☐	100.000	102.192	184266.41	0.1325	P	1.6	2.2
6	☐	200.000	198.890	359975.67	0.2579	P	1.2	-0.6
7	☐	1.000						

y = 0.0013 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

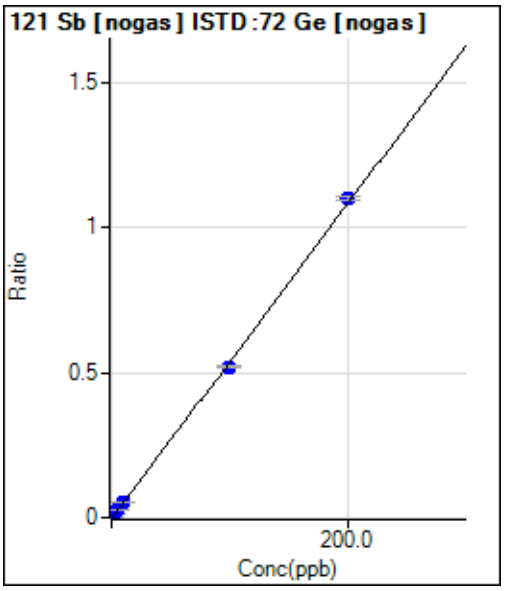


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1160.07	0.0009	P	8.9	
2	☐	2.000	1.979	11404.69	0.0086	P	1.8	-1.0
3	☐	5.000	4.903	26735.05	0.0199	P	0.9	-1.9
4	☐	10.000	9.752	52739.59	0.0388	P	2.8	-2.5
5	☐	100.000	99.532	538983.76	0.3875	P	1.9	-0.5
6	☐	200.000	200.249	1087308.76	0.7788	P	1.7	0.1
7	☐	1.000						

y = 0.0039 * x + 8.7188E-004
R = 1.0000
DL = 0.06007 ppb
BEC = 0.2244 ppb

Weight: <None>
Min Conc: <None>

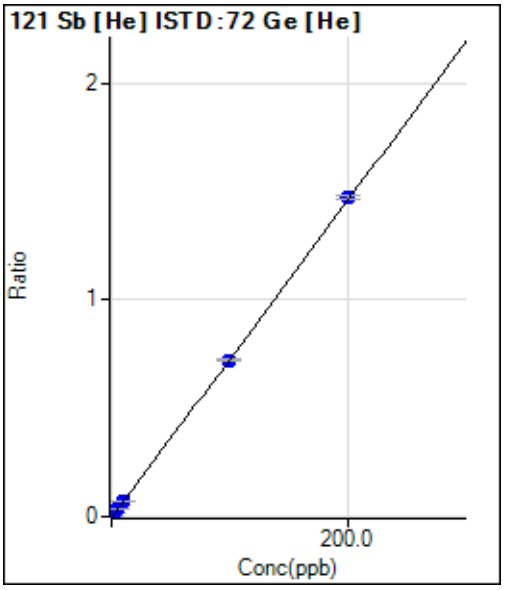
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	943.39	0.0008	P	12.	
2	☐	2.000	1.815	13239.62	0.0106	P	1.8	-9.3
3	☐	5.000	4.596	32096.16	0.0257	P	1.6	-8.1
4	☐	10.000	9.488	65756.34	0.0523	P	1.7	-5.1
5	☐	100.000	95.366	677206.52	0.5192	P	1.2	-4.6
6	☐	200.000	202.354	1429430.97	1.1008	P	1.0	1.2
7	☐	1.000						

y = 0.0054 * x + 7.5892E-004
R = 0.9996
DL = 0.05359 ppb
BEC = 0.1396 ppb

Weight: <None>
Min Conc: <None>

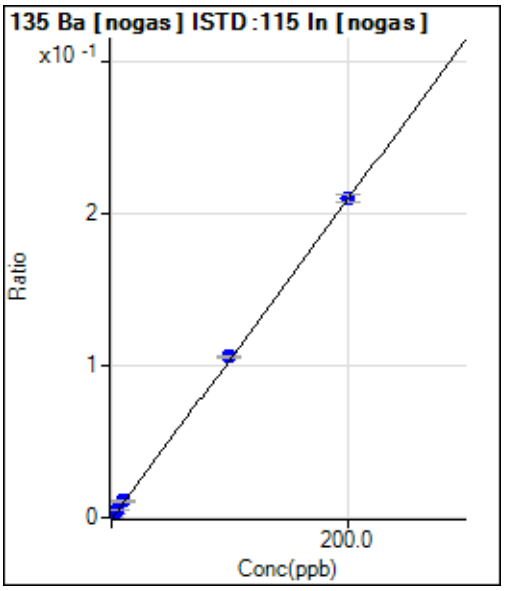


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	523.35	0.0011	P	22.	
2	☐	2.000	1.888	6991.81	0.0150	P	3.9	-5.6
3	☐	5.000	4.734	16826.74	0.0358	P	2.0	-5.3
4	☐	10.000	9.293	33118.37	0.0693	P	2.9	-7.1
5	☐	100.000	98.261	347852.03	0.7216	P	1.0	-1.7
6	☐	200.000	200.913	711022.05	1.4742	P	1.3	0.5
7	☐	1.000						

y = 0.0073 * x + 0.0011
R = 0.9999
DL = 0.1014 ppb
BEC = 0.154 ppb

Weight: <None>
Min Conc: <None>

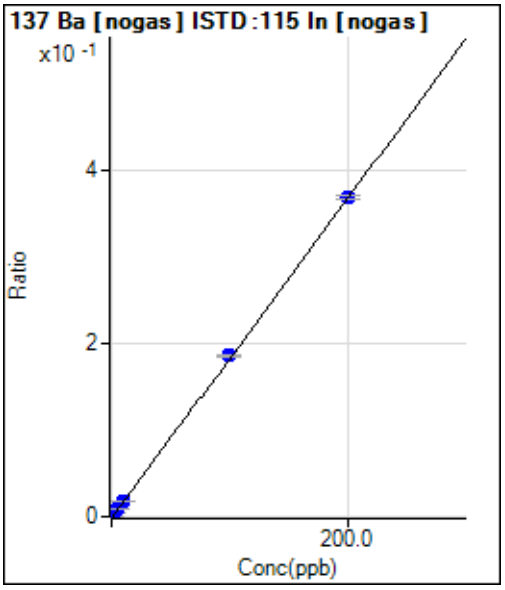
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	79.	
2	☐	2.000	1.903	2696.97	0.0020	P	4.1	-4.9
3	☐	5.000	4.896	6948.47	0.0052	P	3.9	-2.1
4	☐	10.000	10.364	14881.32	0.0109	P	4.6	3.6
5	☐	100.000	100.617	147381.56	0.1060	P	1.1	0.6
6	☐	200.000	199.677	293650.93	0.2103	P	2.1	-0.2
7	☐	1.000						

y = 0.0011 * x + 2.0141E-005
R = 1.0000
DL = 0.04535 ppb
BEC = 0.01912 ppb

Weight: <None>
Min Conc: <None>

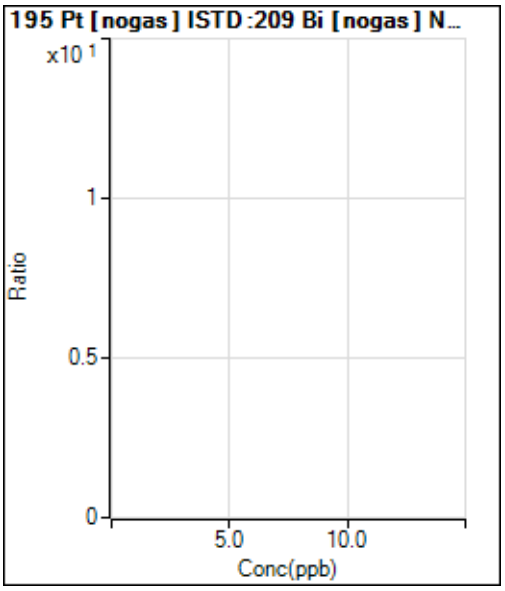


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	60.00	0.0000	P	66.	
2	☐	2.000	2.043	5084.34	0.0038	P	5.1	2.1
3	☐	5.000	4.930	12275.49	0.0091	P	3.5	-1.4
4	☐	10.000	9.981	25132.39	0.0185	P	1.7	-0.2
5	☐	100.000	100.743	258693.45	0.1860	P	1.4	0.7
6	☐	200.000	199.631	514524.84	0.3686	P	1.5	-0.2
7	☐	1.000						

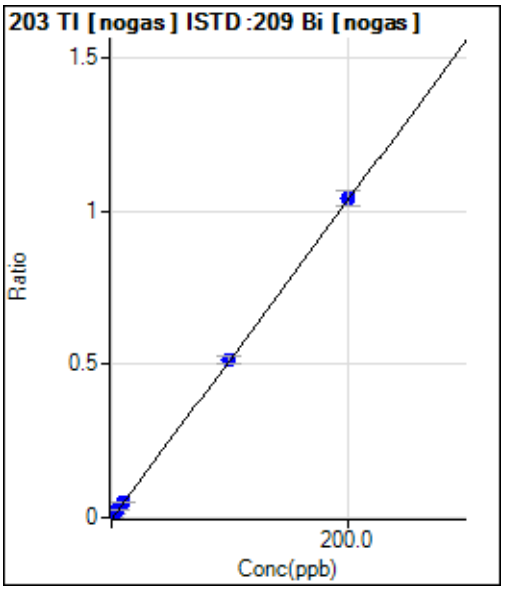
y = 0.0018 * x + 4.4988E-005
R = 1.0000
DL = 0.04865 ppb
BEC = 0.02437 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

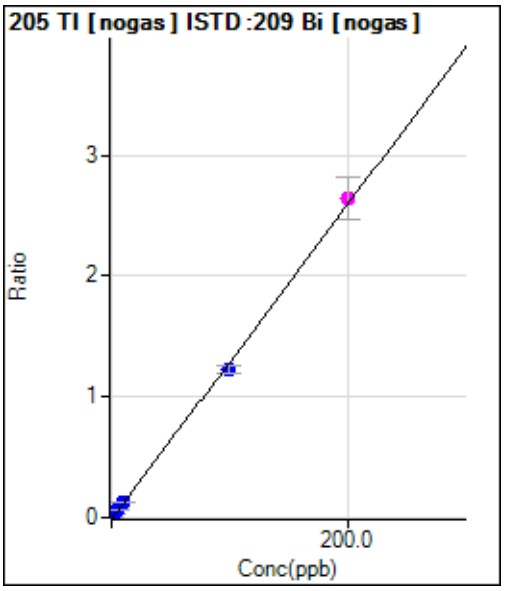


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	61.	
2	☐	2.000	2.020	11932.13	0.0105	P	4.4	1.0
3	☐	5.000	4.864	29121.30	0.0253	P	2.8	-2.7
4	☐	10.000	9.847	59181.47	0.0512	P	5.1	-1.5
5	☐	100.000	99.419	621523.73	0.5167	P	4.6	-0.6
6	☐	200.000	200.301	1259123.86	1.0410	P	4.3	0.2
7	☐	1.000						

y = 0.0052 * x + 2.0474E-005
R = 1.0000
DL = 0.00722 ppb
BEC = 0.003939 ppb

Weight: <None>
Min Conc: <None>

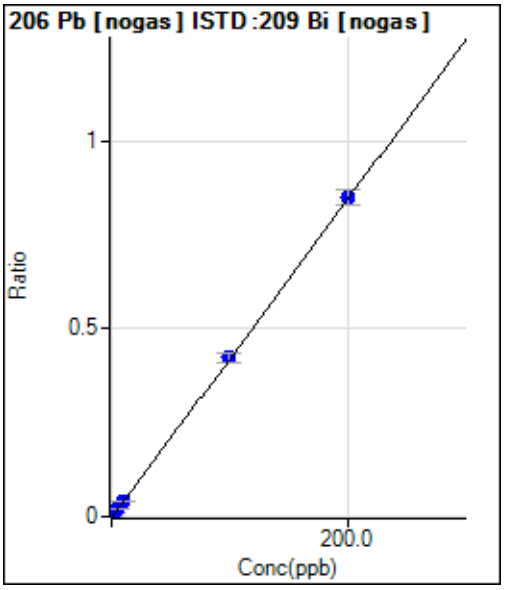
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96.67	0.0001	P	59.	
2	☐	2.000	1.898	28139.33	0.0248	P	5.0	-5.1
3	☐	5.000	4.682	70196.72	0.0611	P	7.8	-6.4
4	☐	10.000	9.408	141797.77	0.1227	P	5.2	-5.9
5	☐	100.000	94.419	1479888.10	1.2304	P	5.4	-5.6
6	☐	200.000	202.829	3194326.73	2.6430	M	13.	1.4
7	☐	1.000						

y = 0.0130 * x + 8.6818E-005
R = 0.9995
DL = 0.01179 ppb
BEC = 0.006663 ppb

Weight: <None>
Min Conc: <None>

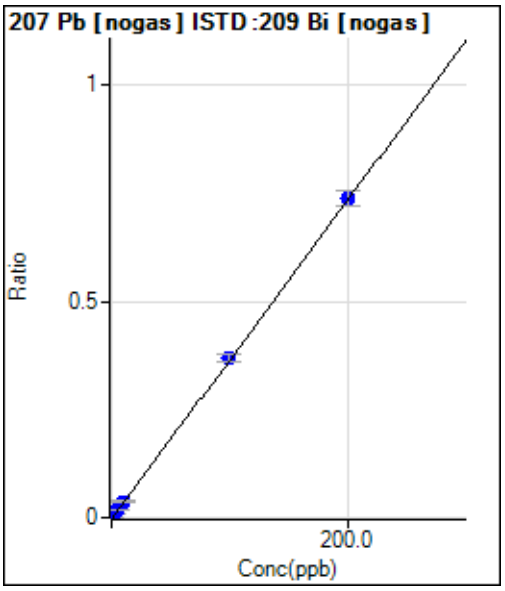


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	17.	
2	☐	2.000	2.059	10173.90	0.0090	P	5.3	2.9
3	☐	5.000	4.990	24629.21	0.0214	P	3.8	-0.2
4	☐	10.000	9.892	48794.53	0.0422	P	6.0	-1.1
5	☐	100.000	99.728	509367.58	0.4235	P	5.8	-0.3
6	☐	200.000	200.141	1027709.36	0.8497	P	4.9	0.1
7	☐	1.000						

y = 0.0042 * x + 2.3320E-004
R = 1.0000
DL = 0.0287 ppb
BEC = 0.05495 ppb

Weight: <None>
Min Conc: <None>

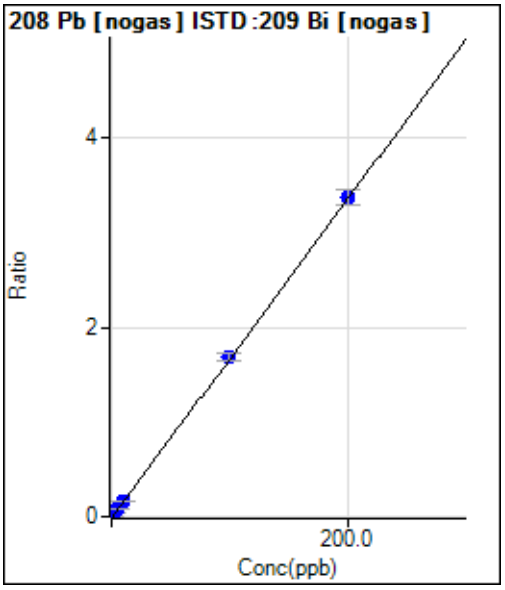
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	12.	
2	☐	2.000	1.996	8579.52	0.0076	P	6.4	-0.2
3	☐	5.000	4.956	21263.49	0.0185	P	4.1	-0.9
4	☐	10.000	9.949	42646.88	0.0369	P	6.0	-0.5
5	☐	100.000	99.762	442855.89	0.3682	P	5.3	-0.2
6	☐	200.000	200.123	893027.69	0.7384	P	4.3	0.1
7	☐	1.000						

y = 0.0037 * x + 2.0470E-004
R = 1.0000
DL = 0.02092 ppb
BEC = 0.0555 ppb

Weight: <None>
Min Conc: <None>

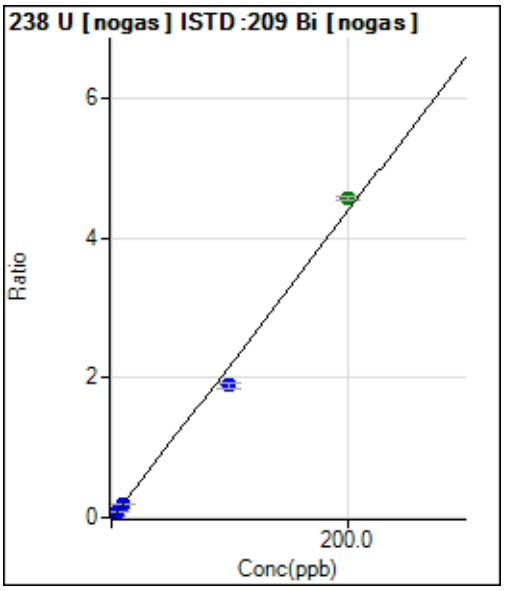


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1010.04	0.0009	P	2.5	
2	☐	2.000	2.020	39686.57	0.0350	P	5.7	1.0
3	☐	5.000	4.968	97473.88	0.0848	P	5.8	-0.6
4	☐	10.000	9.895	194140.91	0.1680	P	5.4	-1.0
5	☐	100.000	100.000	2031821.92	1.6892	P	5.3	0.0
6	☐	200.000	200.006	4085189.52	3.3776	P	4.5	0.0
7	☐	1.000						

y = 0.0169 * x + 9.0060E-004
R = 1.0000
DL = 0.003932 ppb
BEC = 0.05334 ppb

Weight: <None>
Min Conc: <None>

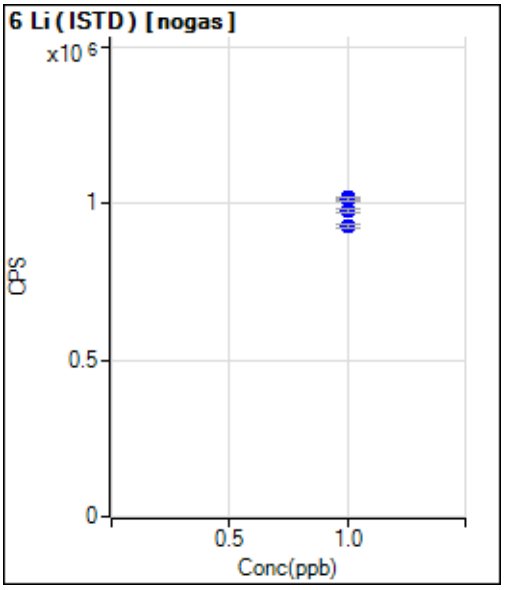
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	42.	
2	☐	2.000	1.685	42216.86	0.0372	P	6.0	-15.7
3	☐	5.000	4.191	106377.95	0.0925	P	6.3	-16.2
4	☐	10.000	8.469	216143.53	0.1870	P	4.0	-15.3
5	☐	100.000	85.620	2273215.02	1.8899	P	5.2	-14.4
6	☐	200.000	207.290	5533669.08	4.5755	A	0.8	3.6
7	☐	1.000						

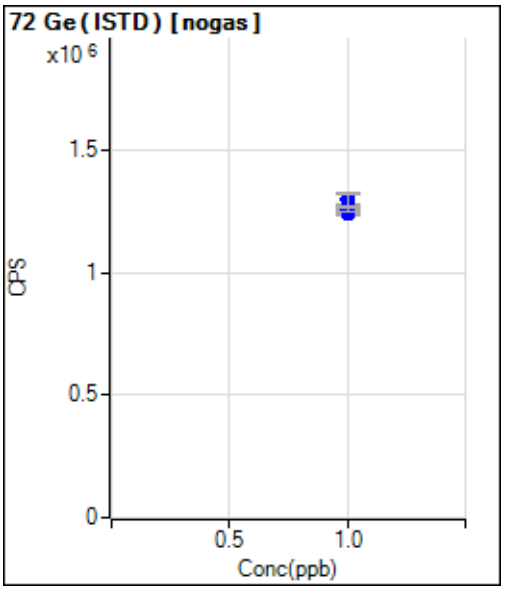
y = 0.0221 * x + 3.2725E-005
R = 0.9965
DL = 0.001895 ppb
BEC = 0.001483 ppb

Weight: <None>
Min Conc: <None>

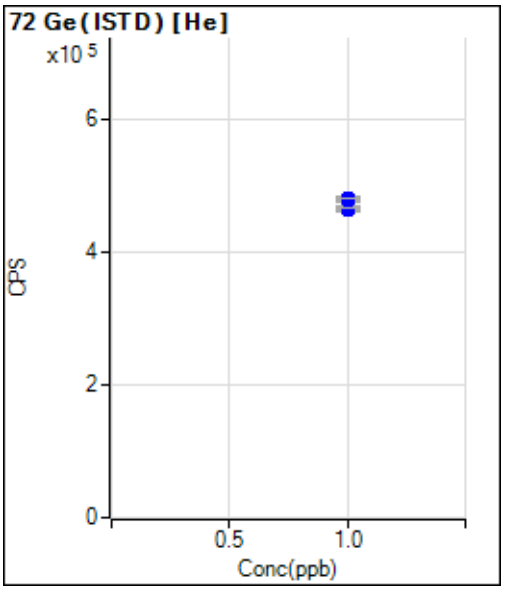


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1019192.69		P	0.5	
2	☐	1.000		1016035.97		P	0.2	
3	☐	1.000		1016954.73		P	0.9	
4	☐	1.000		1015407.04		P	1.3	
5	☐	1.000		976552.32		P	1.3	
6	☐	1.000		926974.35		P	1.9	
7	☐	1.000						

Calibration for 277_ICV.d

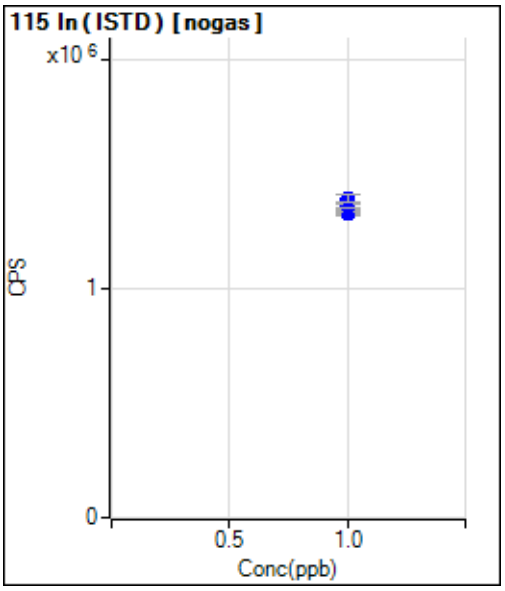


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1242233.31		P	0.9	
2	☐	1.000		1245996.44		P	1.2	
3	☐	1.000		1246871.81		P	1.2	
4	☐	1.000		1256449.30		P	1.2	
5	☐	1.000		1304023.52		P	3.2	
6	☐	1.000		1298265.14		P	3.8	
7	☐	1.000						

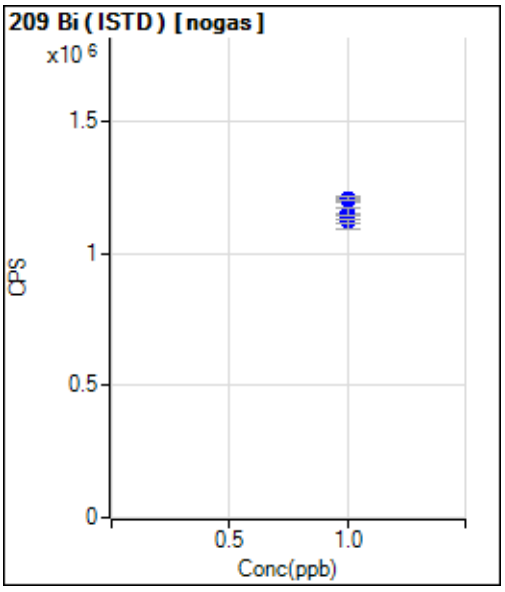


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		464161.96		P	1.0	
2	☐	1.000		466914.16		P	0.6	
3	☐	1.000		469461.87		P	0.5	
4	☐	1.000		478144.43		P	0.6	
5	☐	1.000		482116.50		P	1.2	
6	☐	1.000		482303.47		P	0.3	
7	☐	1.000						

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1329983.84		P	1.1	
2	☐	1.000		1332076.31		P	0.9	
3	☐	1.000		1342284.17		P	0.2	
4	☐	1.000		1360697.93		P	0.8	
5	☐	1.000		1390340.87		P	2.9	
6	☐	1.000		1395713.28		P	2.4	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1120971.65		P	4.6	
2	☐	1.000		1135220.37		P	3.2	
3	☐	1.000		1151572.04		P	4.3	
4	☐	1.000		1156950.63		P	2.7	
5	☐	1.000		1203047.66		P	0.9	
6	☐	1.000		1209451.39		P	1.2	
7	☐	1.000						

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	278_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:03:52-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.107	22.3	585	20.5	1	
B	11	1	nogas	10.963	13.3	52636	7.9	10	ICB Main CR1 Failed
Al	27	1	nogas	2.000	8.8	56755	2.1	5	
P	31	1	nogas	32.389	14.2	23772	0.1	10	ICB Main CR1 Failed
Ti	47	1	nogas	0.293	18.0	480	10.8	2.5	
Ni	60	1	nogas	0.122	14.8	673	9.1	2.5	
Cu	63	1	nogas	0.250	21.3	4097	7.6	1	
Zn	66	1	nogas	0.910	5.0	2684	4.1	2.5	
Se	77	1	nogas	-26.798	-7.6	2744	6.7	2.5	
Se	82	1	nogas	0.318	60.6	140	14.3	1	
Sr	88	1	nogas	0.097	8.5	2247	7.2	2.5	
Mo	95	1	nogas	0.498	25.8	2064	23.3	2.5	
Ag	107	1	nogas	0.087	12.3	853	11.3	2.5	
Cd	111	1	nogas	0.089	25.9	157	26.6	1	
Sn	118	1	nogas	1.076	11.4	6825	9.4	5	
Sb	121	1	nogas	3.451	12.7	24401	10.8	2	ICB Main CR1 Failed
Ba	137	1	nogas	0.256	14.3	700	12.2	2.5	
Tl	205	1	nogas	0.182	12.4	2844	15.8	1	
Pb	208	1	nogas	0.156	11.3	4087	12.2	2.5	
U	238	1	nogas	0.127	30.9	3290	34.3	2.5	
Na	23	2	He	10.306	6.8	63521	1.3	100	
Mg	24	2	He	7.061	10.4	8372	9.2	100	
Al	27	2	He	2.263	13.3	3510	6.7	5	
K	39	2	He	12.953	13.2	128030	1.0	100	
Ca	43	2	He	23.440	43.0	107	30.1	100	
Ca	44	2	He	22.353	9.8	1950	4.9	100	
V	51	2	He	-0.523	-6.3	3769	3.7	2.5	
Cr	52	2	He	0.287	25.3	13049	2.1	2.5	
Mn	55	2	He	0.195	8.4	1357	4.8	2.5	
Fe	56	2	He	10.599	6.4	78500	4.3	100	
Co	59	2	He	0.069	29.8	447	29.1	2.5	
Ni	60	2	He	0.134	16.2	350	9.9	2.5	
Cu	63	2	He	0.144	18.5	1843	5.9	1	
Zn	66	2	He	0.845	30.6	1130	19.2	2.5	
As	75	2	He	0.078	23.3	336	2.9	2.5	
Sb	121	2	He	2.528	3.3	9160	3.6	2	ICB Main CR1 Failed
Se	78	2	He	0.343	101.0	157	16.5	1	
Ti	47	2	He	0.198	40.9	60	33.3	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1251528	1.42	1242233	100.75	70	120	
In	115	1	nogas	1351549	0.89	1329984	101.62	70	120	
Li	6	1	nogas	1015907	0.68	1019193	99.68	70	120	

Initial Calibration Blank (ICB) Report

Bi	209	1	nogas	1154526	3.72	1120972	102.99	70	120	
Ge	72	2	He	465732	0.81	464162	100.34	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	280_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:08:02-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	98.991	0.150	491957	1.58	100	99.0	90	110	
B	11	1	nogas	496.839	0.367	1488493	1.78	500	99.4	90	110	
Al	27	1	nogas	103.710	1.924	1228546	2.08	100	103.7	90	110	
P	31	1	nogas	533.250	1.065	59931	3.04	500	106.7	90	110	
Ti	47	1	nogas	104.128	0.857	115521	3.41	100	104.1	90	110	
Ni	60	1	nogas	104.998	0.944	313100	2.76	100	105.0	90	110	
Cu	63	1	nogas	103.334	1.010	725152	2.87	100	103.3	90	110	
Zn	66	1	nogas	102.627	0.902	207909	4.39	100	102.6	90	110	
Se	77	1	nogas	90.165	7.809	12539	7.78	100	90.2	90	110	
Se	82	1	nogas	102.851	3.268	12145	4.53	100	102.9	90	110	
Sr	88	1	nogas	91.332	2.486	1763849	3.74	100	91.3	90	110	
Mo	95	1	nogas	100.846	2.136	376083	3.25	100	100.8	90	110	
Ag	107	1	nogas	117.862	2.091	1010528	3.27	100	117.9	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	102.005	2.607	183350	3.99	100	102.0	90	110	
Sn	118	1	nogas	101.972	2.888	550448	4.36	100	102.0	90	110	
Sb	121	1	nogas	98.481	1.799	689319	4.13	100	98.5	90	110	
Ba	137	1	nogas	100.614	2.512	257533	3.55	100	100.6	90	110	
Tl	205	1	nogas	96.079	6.433	1489747	5.45	100	96.1	90	110	
Pb	208	1	nogas	101.603	5.829	2042348	5.01	100	101.6	90	110	
U	238	1	nogas	86.671	5.565	2276642	4.77	100	86.7	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	99.928	0.880	1773208	1.73	100	99.9	90	110	
Ba	135	1	nogas	101.512	3.574	148264	4.96	100	101.5	90	110	
Tl	203	1	nogas	100.667	6.368	622572	5.37	100	100.7	90	110	
Na	23	2	He	10650.040	1.428	20692296	1.07	10000	106.5	90	110	
Mg	24	2	He	10678.837	1.709	12007951	1.37	10000	106.8	90	110	
Al	27	2	He	101.624	1.838	77156	1.53	100	101.6	90	110	
K	39	2	He	10607.990	0.538	14153127	0.19	10000	106.1	90	110	
Ca	43	2	He	10409.909	1.991	33504	1.98	10000	104.1	90	110	
Ca	44	2	He	10535.796	1.390	558344	1.48	10000	105.4	90	110	
V	51	2	He	103.465	0.888	546502	0.92	100	103.5	90	110	
Cr	52	2	He	103.762	1.148	568088	0.79	100	103.8	90	110	
Mn	55	2	He	102.637	0.832	489821	0.66	100	102.6	90	110	
Fe	56	2	He	10550.517	1.212	60702189	1.01	10000	105.5	90	110	
Co	59	2	He	103.614	1.312	669198	0.97	100	103.6	90	110	
Ni	60	2	He	103.596	0.786	159226	0.43	100	103.6	90	110	
Cu	63	2	He	103.539	1.028	386724	0.68	100	103.5	90	110	
Zn	66	2	He	105.088	1.364	93873	1.26	100	105.1	90	110	
As	75	2	He	103.314	1.869	71919	1.61	100	103.3	90	110	
Sb	121	2	He	101.287	0.773	356912	0.44	100	101.3	90	110	
Se	78	2	He	105.359	2.480	8688	2.11	100	105.4	90	110	
Ti	47	2	He	104.682	2.301	27315	2.42	100	104.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1285745	3.68	1242233	103.50	70	120	
In	115	1	nogas	1386043	1.46	1329984	104.22	70	120	
Li	6	1	nogas	975518	1.52	1019193	95.71	70	120	
Bi	209	1	nogas	1190456	1.37	1120972	106.20	70	120	
Ge	72	2	He	479889	0.35	464162	103.39	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	281_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:10:05-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.080	5.2	447	5.0	1	
B	11	1	nogas	11.280	11.9	53969	7.8	10	CCB Main CR1 Failed
Al	27	1	nogas	1.122	7.7	46969	1.8	5	
P	31	1	nogas	41.367	21.4	24410	2.4	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.181	34.0	360	18.2	2.5	
Ni	60	1	nogas	0.127	58.5	687	31.1	2.5	
Cu	63	1	nogas	0.016	122.5	2510	5.2	2	
Zn	66	1	nogas	0.275	30.8	1437	11.4	2.5	
Se	77	1	nogas	-27.350	-2.8	2700	2.4	2.5	
Se	82	1	nogas	0.374	88.1	147	25.8	2	
Sr	88	1	nogas	0.084	8.8	1997	5.4	2.5	
Mo	95	1	nogas	0.465	18.2	1947	17.0	2.5	
Ag	107	1	nogas	0.093	18.3	903	14.4	2.5	
Cd	111	1	nogas	0.076	22.3	133	24.1	1	
Sn	118	1	nogas	0.994	6.6	6408	4.9	5	
Sb	121	1	nogas	3.606	10.9	25500	10.3	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.126	34.8	377	31.1	2.5	
Tl	205	1	nogas	0.172	13.7	2674	17.3	1	
Pb	208	1	nogas	0.138	15.6	3700	15.4	2.5	
U	238	1	nogas	0.125	29.6	3217	33.6	2.5	
Na	23	2	He	6.841	6.3	57123	1.4	100	
Mg	24	2	He	6.024	6.3	7255	5.1	100	
Al	27	2	He	1.551	21.8	3004	7.4	5	
K	39	2	He	12.191	13.5	127310	1.1	100	
Ca	43	2	He	15.965	64.4	83	38.6	100	
Ca	44	2	He	13.776	4.0	1513	2.5	100	
V	51	2	He	-0.516	-7.4	3813	5.5	2.5	
Cr	52	2	He	0.253	8.7	12899	1.5	2.5	
Mn	55	2	He	0.085	49.6	850	23.2	2.5	
Fe	56	2	He	8.824	8.0	68728	5.2	100	
Co	59	2	He	0.056	3.3	367	3.1	2.5	
Ni	60	2	He	0.102	43.6	303	22.4	2.5	
Cu	63	2	He	-0.038	-164.4	1187	19.4	2	
Zn	66	2	He	0.275	35.0	640	13.6	2.5	
As	75	2	He	0.032	152.1	306	10.3	2.5	
Sb	121	2	He	2.531	5.4	9186	4.4	2	CCB Main CR1 Failed
Se	78	2	He	0.303	58.9	155	9.7	2	
Ti	47	2	He	0.118	33.0	40	25.0	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1252330	0.22	1242233	100.81	70	120	
In	115	1	nogas	1354158	1.86	1329984	101.82	70	120	
Li	6	1	nogas	1022207	0.28	1019193	100.30	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1144303	3.97	1120972	102.08	70	120	
Ge	72	2	He	466672	0.69	464162	100.54	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	289_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:26:37-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.688	0.059	472603	1.20	100	96.7	90	110	
B	11	1	nogas	506.799	0.218	1492943	1.08	500	101.4	90	110	
Al	27	1	nogas	102.699	0.363	1169638	2.86	100	102.7	90	110	
P	31	1	nogas	540.749	3.863	58080	2.24	500	108.1	90	110	
Ti	47	1	nogas	104.353	0.668	111236	2.94	100	104.4	90	110	
Ni	60	1	nogas	103.440	0.702	296403	2.68	100	103.4	90	110	
Cu	63	1	nogas	103.327	0.855	696858	3.43	100	103.3	90	110	
Zn	66	1	nogas	102.801	0.488	200040	2.58	100	102.8	90	110	
Se	77	1	nogas	97.973	2.246	12659	3.17	100	98.0	90	110	
Se	82	1	nogas	105.080	2.432	11925	4.94	100	105.1	90	110	
Sr	88	1	nogas	93.432	0.125	1741112	2.10	100	93.4	90	110	
Mo	95	1	nogas	102.647	0.824	369420	2.69	100	102.6	90	110	
Ag	107	1	nogas	118.865	1.131	983540	3.00	100	118.9	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	101.462	0.692	175977	2.48	100	101.5	90	110	
Sn	118	1	nogas	101.872	1.514	530673	3.49	100	101.9	90	110	
Sb	121	1	nogas	100.430	0.671	675396	3.27	100	100.4	90	110	
Ba	137	1	nogas	102.510	2.566	253257	4.25	100	102.5	90	110	
Tl	205	1	nogas	97.747	5.787	1489423	4.42	100	97.7	90	110	
Pb	208	1	nogas	102.026	4.978	2015369	3.59	100	102.0	90	110	
U	238	1	nogas	88.053	5.713	2272755	4.39	100	88.1	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.413	0.180	1701852	1.21	100	97.4	90	110	
Ba	135	1	nogas	102.874	0.418	144970	2.40	100	102.9	90	110	
Tl	203	1	nogas	102.180	6.136	620987	4.77	100	102.2	90	110	
Na	23	2	He	10725.851	1.548	20082339	0.63	10000	107.3	90	110	
Mg	24	2	He	10540.028	1.149	11421726	0.25	10000	105.4	90	110	
Al	27	2	He	101.421	1.024	74212	0.34	100	101.4	90	110	
K	39	2	He	10421.455	1.601	13400930	0.79	10000	104.2	90	110	
Ca	43	2	He	10249.047	3.013	31784	1.86	10000	102.5	90	110	
Ca	44	2	He	10453.255	1.035	533870	1.06	10000	104.5	90	110	
V	51	2	He	101.475	1.002	516660	0.96	100	101.5	90	110	
Cr	52	2	He	101.920	1.009	537991	1.46	100	101.9	90	110	
Mn	55	2	He	101.737	1.027	467908	0.69	100	101.7	90	110	
Fe	56	2	He	10517.578	1.674	58316057	1.38	10000	105.2	90	110	
Co	59	2	He	102.284	0.836	636654	0.87	100	102.3	90	110	
Ni	60	2	He	101.678	0.296	150622	1.43	100	101.7	90	110	
Cu	63	2	He	102.879	0.358	370354	1.49	100	102.9	90	110	
Zn	66	2	He	103.287	0.451	88926	0.94	100	103.3	90	110	
As	75	2	He	101.927	1.524	68387	1.77	100	101.9	90	110	
Sb	121	2	He	101.822	1.013	345770	0.40	100	101.8	90	110	
Se	78	2	He	104.354	1.893	8294	0.85	100	104.4	90	110	
Ti	47	2	He	101.581	1.911	25549	3.05	100	101.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1235217	2.61	1242233	99.44	70	120	
In	115	1	nogas	1337666	1.99	1329984	100.58	70	120	
Li	6	1	nogas	959467	1.18	1019193	94.14	70	120	
Bi	209	1	nogas	1169981	1.47	1120972	104.37	70	120	
Ge	72	2	He	462494	1.15	464162	99.64	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	290_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:28:41-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.083	9.8	457	8.1	1	
B	11	1	nogas	22.725	7.8	88009	5.9	10	CCB Main CR1 Failed
Al	27	1	nogas	1.172	11.0	46116	2.9	5	
P	31	1	nogas	36.179	15.6	23338	2.8	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.299	20.5	473	14.4	2.5	
Ni	60	1	nogas	0.115	25.7	633	11.9	2.5	
Cu	63	1	nogas	0.126	18.4	3160	3.8	2	
Zn	66	1	nogas	0.312	28.0	1467	12.5	2.5	
Se	77	1	nogas	-21.758	-14.0	3057	7.0	2.5	
Se	82	1	nogas	0.445	37.2	150	11.5	2	
Sr	88	1	nogas	0.243	10.3	4881	9.3	2.5	
Mo	95	1	nogas	0.670	12.9	2627	12.0	2.5	
Ag	107	1	nogas	0.083	13.3	803	11.6	2.5	
Cd	111	1	nogas	0.070	36.3	120	36.3	1	
Sn	118	1	nogas	1.123	11.7	6922	9.7	5	
Sb	121	1	nogas	3.572	12.9	24495	11.3	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.205	9.3	560	8.2	2.5	
Tl	205	1	nogas	0.221	18.0	3357	20.7	1	
Pb	208	1	nogas	0.167	14.7	4214	14.8	2.5	
U	238	1	nogas	0.132	37.3	3364	41.5	2.5	
Na	23	2	He	98.114	1.1	222896	2.2	100	
Mg	24	2	He	13.229	3.3	14721	4.2	100	
Al	27	2	He	1.500	8.4	2887	4.7	5	
K	39	2	He	11.984	16.8	123527	0.9	100	
Ca	43	2	He	23.377	31.5	103	20.1	100	
Ca	44	2	He	26.645	10.9	2117	8.3	100	
V	51	2	He	-0.486	-9.4	3856	6.1	2.5	
Cr	52	2	He	0.237	25.2	12459	1.0	2.5	
Mn	55	2	He	0.121	21.3	987	10.2	2.5	
Fe	56	2	He	9.302	6.1	69480	6.1	100	
Co	59	2	He	0.078	4.8	490	4.1	2.5	
Ni	60	2	He	0.041	36.8	207	10.1	2.5	
Cu	63	2	He	0.058	28.2	1493	5.7	2	
Zn	66	2	He	0.341	30.0	677	11.1	2.5	
As	75	2	He	0.198	31.0	407	11.3	2.5	
Sb	121	2	He	2.668	4.6	9393	5.9	2	CCB Main CR1 Failed
Se	78	2	He	0.442	75.6	161	17.8	2	
Ti	47	2	He	0.189	88.0	57	73.5	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1215015	1.24	1242233	97.81	70	120	
In	115	1	nogas	1321904	0.39	1329984	99.39	70	120	
Li	6	1	nogas	1005803	1.19	1019193	98.69	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1128652	4.16	1120972	100.69	70	120	
Ge	72	2	He	453819	1.80	464162	97.77	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	296_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:41:10-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.730	0.114	463511	1.42	100	96.7	90	110	
B	11	1	nogas	504.433	0.354	1456914	1.85	500	100.9	90	110	
Al	27	1	nogas	101.417	1.563	1148874	2.12	100	101.4	90	110	
P	31	1	nogas	545.799	3.311	58100	1.42	500	109.2	90	110	
Ti	47	1	nogas	103.003	2.066	109188	3.24	100	103.0	90	110	
Ni	60	1	nogas	103.073	0.966	293731	2.82	100	103.1	90	110	
Cu	63	1	nogas	102.234	0.464	685672	3.06	100	102.2	90	110	
Zn	66	1	nogas	102.598	0.971	198590	3.71	100	102.6	90	110	
Se	77	1	nogas	98.973	9.947	12652	2.70	100	99.0	90	110	
Se	82	1	nogas	100.675	1.484	11368	4.94	100	100.7	90	110	
Sr	88	1	nogas	91.673	0.555	1704841	3.12	100	91.7	90	110	
Mo	95	1	nogas	99.922	1.360	358885	3.69	100	99.9	90	110	
Ag	107	1	nogas	117.500	0.991	970134	3.13	100	117.5	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	101.914	1.859	176429	4.35	100	101.9	90	110	
Sn	118	1	nogas	101.665	1.802	528473	3.98	100	101.7	90	110	
Sb	121	1	nogas	100.972	0.626	675437	4.11	100	101.0	90	110	
Ba	137	1	nogas	101.267	1.269	249640	3.74	100	101.3	90	110	
Tl	205	1	nogas	96.885	5.873	1493132	4.55	100	96.9	90	110	
Pb	208	1	nogas	101.142	5.476	2020692	4.23	100	101.1	90	110	
U	238	1	nogas	86.592	6.016	2260519	4.78	100	86.6	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	98.087	0.130	1679485	1.48	100	98.1	90	110	
Ba	135	1	nogas	101.330	2.684	142536	4.99	100	101.3	90	110	
Tl	203	1	nogas	100.753	5.757	619269	4.08	100	100.8	90	110	
Na	23	2	He	10614.866	0.970	19743943	0.70	10000	106.1	90	110	
Mg	24	2	He	10439.131	0.766	11237850	0.99	10000	104.4	90	110	
Al	27	2	He	99.387	0.761	72279	0.64	100	99.4	90	110	
K	39	2	He	10462.335	1.362	13364489	1.33	10000	104.6	90	110	
Ca	43	2	He	10405.503	1.049	32061	1.34	10000	104.1	90	110	
Ca	44	2	He	10355.930	1.076	525398	1.22	10000	103.6	90	110	
V	51	2	He	101.076	0.620	511229	0.38	100	101.1	90	110	
Cr	52	2	He	101.502	0.317	532253	0.52	100	101.5	90	110	
Mn	55	2	He	101.573	0.515	464062	0.76	100	101.6	90	110	
Fe	56	2	He	10381.835	1.298	57182687	1.26	10000	103.8	90	110	
Co	59	2	He	101.606	0.973	628238	1.08	100	101.6	90	110	
Ni	60	2	He	102.324	1.669	150558	1.54	100	102.3	90	110	
Cu	63	2	He	102.259	0.651	365656	0.33	100	102.3	90	110	
Zn	66	2	He	104.568	1.432	89422	1.11	100	104.6	90	110	
As	75	2	He	101.238	1.023	67474	1.12	100	101.2	90	110	
Sb	121	2	He	102.716	1.298	346493	1.27	100	102.7	90	110	
Se	78	2	He	103.269	2.375	8155	2.29	100	103.3	90	110	
Ti	47	2	He	101.535	2.173	25361	1.85	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1228641	3.49	1242233	98.91	70	120	
In	115	1	nogas	1334831	2.60	1329984	100.36	70	120	
Li	6	1	nogas	940612	1.52	1019193	92.29	70	120	
Bi	209	1	nogas	1183444	2.23	1120972	105.57	70	120	
Ge	72	2	He	459402	0.32	464162	98.97	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	297_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:43:16-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.080	22.6	435	21.5	1	
B	11	1	nogas	24.805	5.8	92902	5.2	10	CCB Main CR1 Failed
Al	27	1	nogas	1.186	2.9	45598	1.6	5	
P	31	1	nogas	49.912	16.7	23902	2.4	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.371	18.9	540	12.8	2.5	
Ni	60	1	nogas	0.122	22.6	643	11.7	2.5	
Cu	63	1	nogas	0.130	21.5	3140	5.1	2	
Zn	66	1	nogas	0.236	38.9	1300	12.7	2.5	
Se	77	1	nogas	-21.470	-9.4	3037	5.9	2.5	
Se	82	1	nogas	0.832	66.5	190	31.6	2	
Sr	88	1	nogas	0.175	8.3	3591	7.2	2.5	
Mo	95	1	nogas	0.608	16.8	2384	15.9	2.5	
Ag	107	1	nogas	0.089	9.8	847	7.6	2.5	
Cd	111	1	nogas	0.063	23.1	107	23.6	1	
Sn	118	1	nogas	1.250	15.6	7502	13.3	5	
Sb	121	1	nogas	3.726	14.8	25139	13.4	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.141	46.2	400	39.7	2.5	
Tl	205	1	nogas	0.185	9.3	2854	9.3	1	
Pb	208	1	nogas	0.178	9.2	4484	9.7	2.5	
U	238	1	nogas	0.122	29.7	3140	34.0	2.5	
Na	23	2	He	103.232	1.5	229964	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	10.246	3.6	11431	3.3	100	
Al	27	2	He	1.716	45.9	3007	18.2	5	
K	39	2	He	14.394	17.5	125311	2.5	100	
Ca	43	2	He	12.554	69.8	70	37.8	100	
Ca	44	2	He	22.788	4.2	1903	2.4	100	
V	51	2	He	-0.433	-0.7	4076	0.3	2.5	
Cr	52	2	He	0.263	32.9	12469	3.4	2.5	
Mn	55	2	He	0.115	9.6	950	5.3	2.5	
Fe	56	2	He	9.022	3.7	67253	2.7	100	
Co	59	2	He	0.055	6.4	347	6.0	2.5	
Ni	60	2	He	0.117	23.9	313	12.9	2.5	
Cu	63	2	He	0.074	29.0	1533	4.8	2	
Zn	66	2	He	0.300	33.8	637	13.2	2.5	
As	75	2	He	0.164	29.8	380	8.5	2.5	
Sb	121	2	He	2.715	7.5	9450	7.1	2	CCB Main CR1 Failed
Se	78	2	He	0.616	21.1	173	5.8	2	
Ti	47	2	He	0.206	34.6	60	28.9	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1197333	0.83	1242233	96.39	70	120	
In	115	1	nogas	1309480	0.83	1329984	98.46	70	120	
Li	6	1	nogas	990010	0.54	1019193	97.14	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1145226	4.30	1120972	102.16	70	120	
Ge	72	2	He	449309	0.13	464162	96.80	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	304_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:57:59-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.513	0.930	451534	1.66	100	96.5	90	110	
B	11	1	nogas	508.158	0.169	1432715	0.88	500	101.6	90	110	
Al	27	1	nogas	101.972	1.563	1120137	1.47	100	102.0	90	110	
P	31	1	nogas	513.882	5.497	54250	2.43	500	102.8	90	110	
Ti	47	1	nogas	101.220	0.703	104065	2.21	100	101.2	90	110	
Ni	60	1	nogas	100.407	0.439	277568	3.29	100	100.4	90	110	
Cu	63	1	nogas	100.875	1.169	656357	4.04	100	100.9	90	110	
Zn	66	1	nogas	102.530	1.285	192505	4.12	100	102.5	90	110	
Se	77	1	nogas	151.381	4.826	16309	1.14	100	151.4	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	103.050	1.531	11281	4.27	100	103.1	90	110	
Sr	88	1	nogas	90.933	0.790	1653426	2.97	100	90.9	90	110	
Mo	95	1	nogas	99.234	0.818	348472	3.23	100	99.2	90	110	
Ag	107	1	nogas	116.306	1.434	939051	3.81	100	116.3	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	100.174	1.997	169558	4.34	100	100.2	90	110	
Sn	118	1	nogas	100.799	1.598	512350	3.98	100	100.8	90	110	
Sb	121	1	nogas	99.524	1.132	645686	3.96	100	99.5	90	110	
Ba	137	1	nogas	100.255	2.144	241681	4.54	100	100.3	90	110	
Tl	205	1	nogas	95.521	6.231	1451856	4.49	100	95.5	90	110	
Pb	208	1	nogas	100.152	5.823	1973352	4.06	100	100.2	90	110	
U	238	1	nogas	86.743	6.374	2233258	4.64	100	86.7	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	98.175	0.344	1641113	1.02	100	98.2	90	110	
Ba	135	1	nogas	100.728	0.807	138486	2.60	100	100.7	90	110	
Tl	203	1	nogas	99.351	6.455	602288	4.74	100	99.4	90	110	
Na	23	2	He	10873.775	0.389	19483238	0.76	10000	108.7	90	110	
Mg	24	2	He	10613.161	0.496	11006143	0.82	10000	106.1	90	110	
Al	27	2	He	100.220	0.688	70204	1.73	100	100.2	90	110	
K	39	2	He	10464.321	0.114	12877370	1.20	10000	104.6	90	110	
Ca	43	2	He	10242.837	1.031	30404	1.82	10000	102.4	90	110	
Ca	44	2	He	10223.155	0.766	499660	1.28	10000	102.2	90	110	
V	51	2	He	101.858	0.694	496265	1.30	100	101.9	90	110	
Cr	52	2	He	101.754	0.916	513979	1.09	100	101.8	90	110	
Mn	55	2	He	102.092	1.226	449317	1.15	100	102.1	90	110	
Fe	56	2	He	10504.544	1.086	55739858	1.74	10000	105.0	90	110	
Co	59	2	He	101.807	0.908	606378	0.77	100	101.8	90	110	
Ni	60	2	He	101.280	0.299	143563	0.81	100	101.3	90	110	
Cu	63	2	He	102.404	0.760	352747	0.77	100	102.4	90	110	
Zn	66	2	He	101.184	0.338	83372	0.95	100	101.2	90	110	
As	75	2	He	101.285	1.738	65023	0.70	100	101.3	90	110	
Sb	121	2	He	101.656	0.820	330346	0.73	100	101.7	90	110	
Se	78	2	He	102.829	1.611	7823	1.37	100	102.8	90	110	
Ti	47	2	He	103.094	1.837	24807	1.84	100	103.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1191518	2.89	1242233	95.92	70	120	
In	115	1	nogas	1305122	2.42	1329984	98.13	70	120	
Li	6	1	nogas	918324	0.95	1019193	90.10	70	120	
Bi	209	1	nogas	1167346	2.18	1120972	104.14	70	120	
Ge	72	2	He	442569	1.10	464162	95.35	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	305_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:00:06-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.061	8.1	325	6.7	1	
B	11	1	nogas	25.249	6.1	91051	4.4	10	CCB Main CR1 Failed
Al	27	1	nogas	1.059	3.4	42786	0.5	5	
P	31	1	nogas	49.677	5.1	23104	0.8	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.158	60.6	310	30.8	2.5	
Ni	60	1	nogas	0.090	45.8	537	20.1	2.5	
Cu	63	1	nogas	0.064	46.8	2624	6.7	2	
Zn	66	1	nogas	0.165	43.9	1130	11.5	2.5	
Se	77	1	nogas	4.980	25.3	4914	1.4	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.163	87.2	113	13.5	2	
Sr	88	1	nogas	0.187	9.5	3734	7.7	2.5	
Mo	95	1	nogas	0.415	20.5	1670	18.4	2.5	
Ag	107	1	nogas	0.070	4.4	680	4.4	2.5	
Cd	111	1	nogas	0.056	21.9	93	22.3	1	
Sn	118	1	nogas	0.893	10.0	5565	8.7	5	
Sb	121	1	nogas	3.176	16.0	20866	14.8	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.136	21.7	380	18.2	2.5	
Tl	205	1	nogas	0.127	26.4	1977	29.5	1	
Pb	208	1	nogas	0.135	21.5	3614	19.5	2.5	
U	238	1	nogas	0.108	41.4	2764	45.0	2.5	
Na	23	2	He	136.425	2.4	280449	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	9.700	3.5	10490	2.4	100	
Al	27	2	He	1.829	16.7	2980	5.4	5	
K	39	2	He	11.949	26.9	118154	2.2	100	
Ca	43	2	He	16.860	62.0	80	37.5	100	
Ca	44	2	He	24.893	8.8	1940	5.0	100	
V	51	2	He	-0.124	-19.7	5398	2.4	2.5	
Cr	52	2	He	0.150	96.9	11501	5.9	2.5	
Mn	55	2	He	0.147	10.9	1057	7.4	2.5	
Fe	56	2	He	6.988	4.4	54399	1.9	100	
Co	59	2	He	0.030	26.9	190	24.1	2.5	
Ni	60	2	He	0.076	46.6	247	20.4	2.5	
Cu	63	2	He	-0.028	-65.6	1137	6.2	2	
Zn	66	2	He	0.292	26.8	610	11.8	2.5	
As	75	2	He	0.183	6.1	379	2.2	2.5	
Sb	121	2	He	2.207	7.1	7515	6.2	2	CCB Main CR1 Failed
Se	78	2	He	0.404	25.7	151	5.3	2	
Ti	47	2	He	0.117	77.9	37	56.8	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1158106	0.52	1242233	93.23	70	120	
In	115	1	nogas	1281059	0.85	1329984	96.32	70	120	
Li	6	1	nogas	956839	0.72	1019193	93.88	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1129288	4.08	1120972	100.74	70	120	
Ge	72	2	He	434258	1.47	464162	93.56	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	314_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:19:13-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.818	0.137	438983	1.46	100	96.8	90	110	
B	11	1	nogas	498.384	0.768	1362269	2.19	500	99.7	90	110	
Al	27	1	nogas	103.355	1.559	1105167	2.07	100	103.4	90	110	
P	31	1	nogas	596.106	6.646	58060	0.93	500	119.2	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	100.871	1.996	100967	1.83	100	100.9	90	110	
Ni	60	1	nogas	100.804	1.184	271296	2.58	100	100.8	90	110	
Cu	63	1	nogas	100.827	0.970	638847	4.12	100	100.8	90	110	
Zn	66	1	nogas	101.634	0.818	185792	3.44	100	101.6	90	110	
Se	77	1	nogas	150.977	2.908	15855	1.63	100	151.0	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	103.927	4.755	11064	1.41	100	103.9	90	110	
Sr	88	1	nogas	89.652	1.876	1590052	3.35	100	89.7	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.566	1.459	337586	2.96	100	98.6	90	110	
Ag	107	1	nogas	100.684	2.304	792910	3.99	100	100.7	90	110	
Cd	111	1	nogas	100.554	1.774	165984	3.46	100	100.6	90	110	
Sn	118	1	nogas	100.850	2.482	499982	4.23	100	100.8	90	110	
Sb	121	1	nogas	99.453	1.311	628264	3.89	100	99.5	90	110	
Ba	137	1	nogas	100.614	2.409	236542	4.01	100	100.6	90	110	
Tl	205	1	nogas	95.801	5.806	1424945	6.01	100	95.8	90	110	
Pb	208	1	nogas	101.249	4.702	1952155	4.93	100	101.2	90	110	
U	238	1	nogas	87.584	5.724	2206658	5.92	100	87.6	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.874	0.555	1585756	0.92	100	97.9	90	110	
Ba	135	1	nogas	102.348	1.720	137266	3.39	100	102.3	90	110	
Tl	203	1	nogas	100.774	6.173	597838	6.33	100	100.8	90	110	
Na	23	2	He	10537.281	0.752	18578236	2.34	10000	105.4	90	110	
Mg	24	2	He	10329.197	0.661	10538369	1.38	10000	103.3	90	110	
Al	27	2	He	102.304	2.774	70444	1.18	100	102.3	90	110	
K	39	2	He	10070.062	0.818	12194880	1.15	10000	100.7	90	110	
Ca	43	2	He	10004.987	0.685	29218	1.99	10000	100.0	90	110	
Ca	44	2	He	10035.306	0.678	482532	1.00	10000	100.4	90	110	
V	51	2	He	100.884	1.518	483579	1.18	100	100.9	90	110	
Cr	52	2	He	100.324	1.066	498675	0.55	100	100.3	90	110	
Mn	55	2	He	101.375	1.379	438905	0.38	100	101.4	90	110	
Fe	56	2	He	10338.792	0.419	53974653	2.01	10000	103.4	90	110	
Co	59	2	He	101.183	1.441	592864	0.61	100	101.2	90	110	
Ni	60	2	He	101.140	1.209	141036	0.95	100	101.1	90	110	
Cu	63	2	He	102.211	1.086	346367	0.66	100	102.2	90	110	
Zn	66	2	He	103.168	2.299	83613	1.80	100	103.2	90	110	
As	75	2	He	100.250	0.983	63323	0.88	100	100.2	90	110	
Sb	121	2	He	100.413	1.547	320999	0.36	100	100.4	90	110	
Se	78	2	He	101.975	2.545	7633	2.04	100	102.0	90	110	
Ti	47	2	He	98.445	2.815	23301	1.84	100	98.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1160401	3.55	1242233	93.41	70	120	
In	115	1	nogas	1272933	1.76	1329984	95.71	70	120	
Li	6	1	nogas	890018	1.45	1019193	87.33	70	120	
Bi	209	1	nogas	1141349	0.46	1120972	101.82	70	120	
Ge	72	2	He	435412	1.59	464162	93.81	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	315_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:21:22-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.054	2.7	282	2.1	1	
B	11	1	nogas	22.535	5.9	80470	4.3	10	CCB Main CR1 Failed
Al	27	1	nogas	1.064	2.0	41703	1.5	5	
P	31	1	nogas	58.775	4.3	23058	1.5	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.256	28.9	397	17.7	2.5	
Ni	60	1	nogas	0.078	27.8	490	10.8	2.5	
Cu	63	1	nogas	0.020	411.4	2277	20.8	2	
Zn	66	1	nogas	0.252	10.8	1253	2.8	2.5	
Se	77	1	nogas	11.136	28.8	5231	3.8	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.256	149.2	120	33.3	2	
Sr	88	1	nogas	0.095	10.0	2044	7.4	2.5	
Mo	95	1	nogas	0.409	10.5	1607	9.7	2.5	
Ag	107	1	nogas	0.042	63.5	443	47.0	2.5	
Cd	111	1	nogas	0.043	86.3	70	86.9	1	
Sn	118	1	nogas	0.842	6.6	5184	5.9	5	
Sb	121	1	nogas	3.160	15.6	20201	14.0	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.098	31.8	283	26.0	2.5	
Tl	205	1	nogas	0.125	21.3	1944	25.6	1	
Pb	208	1	nogas	0.107	33.6	3067	28.0	2.5	
U	238	1	nogas	0.106	49.3	2694	53.9	2.5	
Na	23	2	He	95.239	0.8	203211	0.9	100	
Mg	24	2	He	5.226	7.5	5798	6.8	100	
Al	27	2	He	1.579	11.2	2747	4.8	5	
K	39	2	He	7.907	29.5	110608	2.5	100	
Ca	43	2	He	10.367	120.5	60	60.1	100	
Ca	44	2	He	19.673	16.4	1650	9.5	100	
V	51	2	He	0.020	270.8	5927	3.2	2.5	
Cr	52	2	He	0.081	122.6	10897	3.5	2.5	
Mn	55	2	He	0.085	23.3	773	11.7	2.5	
Fe	56	2	He	5.297	6.6	44520	4.6	100	
Co	59	2	He	0.021	19.2	137	16.9	2.5	
Ni	60	2	He	0.012	127.8	153	13.6	2.5	
Cu	63	2	He	-0.087	-58.1	917	19.1	2	
Zn	66	2	He	0.202	51.0	523	14.6	2.5	
As	75	2	He	0.170	40.3	362	12.2	2.5	
Sb	121	2	He	2.188	6.6	7279	6.5	2	CCB Main CR1 Failed
Se	78	2	He	0.383	104.5	146	19.0	2	
Ti	47	2	He	0.105	95.3	33	69.3	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1127370	1.04	1242233	90.75	70	120	
In	115	1	nogas	1250668	0.68	1329984	94.04	70	120	
Li	6	1	nogas	925713	0.38	1019193	90.83	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1121458	5.18	1120972	100.04	70	120	
Ge	72	2	He	423780	0.93	464162	91.30	70	120	

Sample Report

Sample Table

Sample Name	LCS-198597
Data File Name	317SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:25:40-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	45.132	45.132	1.44	214540	0.02	2000	
B	11	1	nogas	447.409	447.409	1.23	1283764	0.03	2000	
Al	27	1	nogas	99.731	99.731	1.80	1091230	0.01	2000	
Ti	47	1	nogas	138.375	138.375	1.81	141528	0.10	2000	
Ni	60	1	nogas	48.144	48.144	1.06	132621	0.04	2000	
Cu	63	1	nogas	48.319	48.319	0.58	314106	0.02	2000	
Zn	66	1	nogas	51.088	51.088	1.94	95923	0.05	2000	
Se	77	1	nogas	87.331	87.331	9.09	11328	0.77	2000	
Se	82	1	nogas	53.149	53.149	0.37	5838	0.91	2000	
Sr	88	1	nogas	81.346	81.346	2.65	1483281	0.01	2000	
Mo	95	1	nogas	44.231	44.231	3.38	155891	0.03	2000	
Ag	107	1	nogas	46.118	46.118	4.03	373434	0.01	2000	
Cd	111	1	nogas	47.681	47.681	2.98	80908	0.06	2000	
Sn	118	1	nogas	89.491	89.491	3.36	456193	0.02	2000	
Sb	121	1	nogas	50.020	50.020	0.77	323483	0.02	2000	
Ba	137	1	nogas	46.358	46.358	3.34	112061	0.04	2000	
Tl	205	1	nogas	40.934	40.934	10.01	638824	0.01	2000	
Pb	208	1	nogas	45.112	45.112	8.98	913421	0.00	2000	
U	238	1	nogas	75.622	75.622	9.40	1999179	0.00	2000	
Na	23	2	He	4951.344	4951.344	0.91	8970394	0.06	200000	
Mg	24	2	He	4899.616	4899.616	0.71	5125405	0.10	200000	
Al	27	2	He	98.887	98.887	0.26	69885	0.14	2000	
K	39	2	He	4851.961	4851.961	0.55	6079447	0.08	200000	
Ca	43	2	He	4894.119	4894.119	0.90	14667	33.37	200000	
Ca	44	2	He	4813.470	4813.470	1.51	237657	2.03	200000	
V	51	2	He	46.611	46.611	0.61	232379	0.02	2000	
Cr	52	2	He	46.850	46.850	1.09	244644	0.02	2000	
Mn	55	2	He	47.240	47.240	1.14	209923	0.02	2000	
Fe	56	2	He	4888.389	4888.389	0.85	26169605	0.02	200000	
Co	59	2	He	47.237	47.237	1.87	283743	0.02	2000	
Ni	60	2	He	47.453	47.453	2.88	67903	0.07	2000	
Cu	63	2	He	48.620	48.620	0.72	169593	0.03	2000	
Zn	66	2	He	51.345	51.345	0.84	42862	0.12	2000	
As	75	2	He	48.557	48.557	1.24	31583	0.15	2000	
Sb	121	2	He	50.395	50.395	0.72	165436	0.03	2000	
Se	78	2	He	50.157	50.157	2.21	3913	1.28	2000	
Ti	47	2	He	136.062	136.062	2.50	33013	0.41	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1186136	3.25	1242233	95.48	70	120	
In	115	1	nogas	1308623	1.21	1329984	98.39	70	120	
Li	6	1	nogas	933055	0.91	1019193	91.55	70	120	
Bi	209	1	nogas	1201444	5.04	1120972	107.18	70	120	

Sample Report

Ge	72	2	He	446369	1.34	464162	96.17	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02SD
Data File Name	319SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:29:56-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	0.025	0.126	29.56	148	0.02	2000	
B	11	1	nogas	128.643	643.216	1.48	380765	0.03	2000	
Al	27	1	nogas	6.500	32.498	0.66	97749	0.01	2000	
Ti	47	1	nogas	0.643	3.217	10.21	783	0.08	2000	
Ni	60	1	nogas	0.748	3.738	6.20	2267	0.03	2000	
Cu	63	1	nogas	0.238	1.188	13.72	3661	0.01	2000	
Zn	66	1	nogas	0.922	4.609	6.09	2467	0.04	2000	
Se	77	1	nogas	39.587	197.935	9.69	7392	0.54	2000	
Se	82	1	nogas	0.309	1.544	132.76	127	0.24	2000	
Sr	88	1	nogas	119.819	599.095	2.19	2069400	0.01	2000	
Mo	95	1	nogas	0.214	1.070	25.10	943	0.02	2000	
Ag	107	1	nogas	0.032	0.159	62.69	363	0.01	2000	
Cd	111	1	nogas	0.027	0.135	70.13	43	0.06	2000	
Sn	118	1	nogas	0.519	2.594	7.71	3581	0.01	2000	
Sb	121	1	nogas	0.692	3.462	3.89	5161	0.01	2000	
Ba	137	1	nogas	45.395	226.973	2.82	103950	0.04	2000	
Tl	205	1	nogas	0.066	0.330	16.64	1027	0.01	2000	
Pb	208	1	nogas	0.187	0.936	8.48	4380	0.00	2000	
U	238	1	nogas	0.050	0.249	11.48	1220	0.00	2000	
Na	23	2	He	67408.807	337044.036	1.75	115367978	0.06	200000	
Mg	24	2	He	15631.066	78155.329	2.05	15511014	0.10	200000	
Al	27	2	He	7.055	35.274	6.26	6321	0.11	2000	
K	39	2	He	353.477	1767.384	1.12	514126	0.07	200000	
Ca	43	2	He	18314.350	91571.749	0.71	51996	35.22	200000	
Ca	44	2	He	18404.616	92023.081	1.24	860198	2.14	200000	
V	51	2	He	1.055	5.276	3.19	10694	0.01	2000	
Cr	52	2	He	0.659	3.297	19.37	13630	0.00	2000	
Mn	55	2	He	146.744	733.718	1.03	617857	0.02	2000	
Fe	56	2	He	2225.578	11127.891	0.16	11314767	0.02	200000	
Co	59	2	He	0.100	0.498	2.70	583	0.02	2000	
Ni	60	2	He	0.482	2.409	4.41	790	0.06	2000	
Cu	63	2	He	0.030	0.150	90.62	1300	0.00	2000	
Zn	66	2	He	0.970	4.851	9.20	1127	0.09	2000	
As	75	2	He	5.792	28.962	3.42	3802	0.15	2000	
Sb	121	2	He	0.651	3.257	10.69	2500	0.03	2000	
Se	78	2	He	0.354	1.770	47.72	144	0.25	2000	
Ti	47	2	He	0.569	2.846	35.40	140	0.41	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1141317	1.65	1242233	91.88	70	120	
In	115	1	nogas	1239970	0.71	1329984	93.23	70	120	
Li	6	1	nogas	931386	0.57	1019193	91.38	70	120	
Bi	209	1	nogas	1080402	5.09	1120972	96.38	70	120	

Sample Report

Ge	72	2	He	423518	0.64	464162	91.24	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MS
Data File Name	320SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:32:04-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	49.166	49.166	0.74	223467	0.02	2000	
B	11	1	nogas	943.064	943.064	1.48	2569020	0.04	2000	
Al	27	1	nogas	109.826	109.826	0.10	1157508	0.01	2000	
Ti	47	1	nogas	155.260	155.260	1.65	153403	0.10	2000	
Ni	60	1	nogas	50.672	50.672	0.92	134773	0.04	2000	
Cu	63	1	nogas	49.888	49.888	0.40	313058	0.02	2000	
Zn	66	1	nogas	51.751	51.751	1.13	93789	0.06	2000	
Se	77	1	nogas	120.545	120.545	5.18	13413	0.90	2000	
Se	82	1	nogas	53.231	53.231	2.86	5645	0.94	2000	
Sr	88	1	nogas	829.231	829.231	1.58	14204863	0.01	2000	
Mo	95	1	nogas	49.162	49.162	2.60	162798	0.03	2000	
Ag	107	1	nogas	46.587	46.587	2.74	354496	0.01	2000	
Cd	111	1	nogas	47.975	47.975	2.63	76508	0.06	2000	
Sn	118	1	nogas	95.282	95.282	3.48	456400	0.02	2000	
Sb	121	1	nogas	51.670	51.670	1.13	322636	0.02	2000	
Ba	137	1	nogas	274.088	274.088	2.51	622409	0.04	2000	
Tl	205	1	nogas	46.169	46.169	7.43	627247	0.01	2000	
Pb	208	1	nogas	49.210	49.210	7.67	867040	0.01	2000	
U	238	1	nogas	86.994	86.994	7.78	2001651	0.00	2000	
Na	23	2	He	327954.407	327954.407	0.63	570648831	0.06	200000	>LDR
Mg	24	2	He	80134.170	80134.170	1.11	80865164	0.10	200000	
Al	27	2	He	108.089	108.089	0.27	73542	0.15	2000	
K	39	2	He	7057.010	7057.010	0.98	8484565	0.08	200000	
Ca	43	2	He	95605.031	95605.031	1.23	275899	34.65	200000	
Ca	44	2	He	108932.130	108932.130	1.04	5173714	2.11	200000	
V	51	2	He	52.985	52.985	0.99	254063	0.02	2000	
Cr	52	2	He	50.535	50.535	1.57	253779	0.02	2000	
Mn	55	2	He	741.991	741.991	0.58	3175425	0.02	2000	
Fe	56	2	He	15312.889	15312.889	1.25	79059394	0.02	200000	
Co	59	2	He	48.939	48.939	0.97	283677	0.02	2000	
Ni	60	2	He	49.481	49.481	3.22	68318	0.07	2000	
Cu	63	2	He	48.910	48.910	0.84	164604	0.03	2000	
Zn	66	2	He	51.853	51.853	0.29	41759	0.12	2000	
As	75	2	He	79.061	79.061	0.63	49456	0.16	2000	
Sb	121	2	He	53.243	53.243	1.29	168616	0.03	2000	
Se	78	2	He	52.573	52.573	2.45	3951	1.33	2000	
Ti	47	2	He	149.985	149.985	0.57	35118	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1145304	2.63	1242233	92.20	70	120	
In	115	1	nogas	1229908	0.60	1329984	92.48	70	120	
Li	6	1	nogas	892116	1.19	1019193	87.53	70	120	
Bi	209	1	nogas	1044761	4.34	1120972	93.20	70	120	
Ge	72	2	He	430686	0.85	464162	92.79	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MSD
Data File Name	321SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:34:11-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	52.103	52.103	1.02	238084	0.02	2000	
B	11	1	nogas	1020.147	1020.147	1.92	2792492	0.04	2000	
Al	27	1	nogas	114.945	114.945	0.55	1227008	0.01	2000	
Ti	47	1	nogas	161.836	161.836	0.79	162112	0.10	2000	
Ni	60	1	nogas	54.251	54.251	0.14	146293	0.04	2000	
Cu	63	1	nogas	51.925	51.925	0.55	330332	0.02	2000	
Zn	66	1	nogas	53.740	53.740	1.54	98734	0.05	2000	
Se	77	1	nogas	117.058	117.058	1.98	13330	0.88	2000	
Se	82	1	nogas	54.477	54.477	2.43	5858	0.93	2000	
Sr	88	1	nogas	854.396	854.396	1.49	14804708	0.01	2000	
Mo	95	1	nogas	52.196	52.196	2.90	174842	0.03	2000	
Ag	107	1	nogas	48.154	48.154	1.79	370650	0.01	2000	
Cd	111	1	nogas	51.132	51.132	2.66	82493	0.06	2000	
Sn	118	1	nogas	103.810	103.810	2.13	502917	0.02	2000	
Sb	121	1	nogas	54.812	54.812	1.20	346984	0.02	2000	
Ba	137	1	nogas	286.535	286.535	2.04	658230	0.04	2000	
Tl	205	1	nogas	49.063	49.063	8.62	679150	0.01	2000	
Pb	208	1	nogas	52.171	52.171	8.06	936685	0.01	2000	
U	238	1	nogas	91.758	91.758	7.75	2151845	0.00	2000	
Na	23	2	He	339005.331	339005.331	0.92	590119178	0.06	200000	>LDR
Mg	24	2	He	83961.680	83961.680	0.99	84771342	0.10	200000	
Al	27	2	He	113.404	113.404	0.91	77109	0.15	2000	
K	39	2	He	7364.033	7364.033	1.85	8852111	0.08	200000	
Ca	43	2	He	99524.181	99524.181	1.59	287299	34.64	200000	
Ca	44	2	He	114234.696	114234.696	1.67	5427806	2.10	200000	
V	51	2	He	55.446	55.446	1.29	265687	0.02	2000	
Cr	52	2	He	52.849	52.849	1.30	265035	0.02	2000	
Mn	55	2	He	779.837	779.837	0.69	3338740	0.02	2000	
Fe	56	2	He	15926.391	15926.391	1.18	82257985	0.02	200000	
Co	59	2	He	51.819	51.819	0.69	300501	0.02	2000	
Ni	60	2	He	52.579	52.579	2.62	72615	0.07	2000	
Cu	63	2	He	50.834	50.834	0.65	171092	0.03	2000	
Zn	66	2	He	53.203	53.203	1.26	42852	0.12	2000	
As	75	2	He	83.399	83.399	0.54	52179	0.16	2000	
Sb	121	2	He	54.693	54.693	1.19	173265	0.03	2000	
Se	78	2	He	56.618	56.618	2.20	4248	1.33	2000	
Ti	47	2	He	160.721	160.721	0.60	37647	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1161318	2.49	1242233	93.49	70	120	
In	115	1	nogas	1244207	0.82	1329984	93.55	70	120	
Li	6	1	nogas	896899	0.40	1019193	88.00	70	120	
Bi	209	1	nogas	1064916	4.53	1120972	95.00	70	120	
Ge	72	2	He	430878	1.30	464162	92.83	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02PDS
Data File Name	322SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:36:18-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	102.674	102.674	0.97	476702	0.02	2000	
B	11	1	nogas	497.498	497.498	0.34	1392364	0.04	2000	
Al	27	1	nogas	115.941	115.941	0.79	1222152	0.01	2000	
Ti	47	1	nogas	110.435	110.435	1.50	109278	0.10	2000	
Ni	60	1	nogas	105.996	105.996	0.39	282041	0.04	2000	
Cu	63	1	nogas	103.485	103.485	0.96	648065	0.02	2000	
Zn	66	1	nogas	108.399	108.399	1.59	195830	0.06	2000	
Se	77	1	nogas	160.580	160.580	6.81	16403	0.98	2000	
Se	82	1	nogas	111.906	111.906	4.25	11788	0.95	2000	
Sr	88	1	nogas	688.938	688.938	0.63	11814647	0.01	2000	
Mo	95	1	nogas	105.007	105.007	2.33	347853	0.03	2000	
Ag	107	1	nogas	82.954	82.954	2.67	631836	0.01	2000	
Cd	111	1	nogas	104.308	104.308	3.19	166528	0.06	2000	
Sn	118	1	nogas	1.747	1.747	6.14	9430	0.02	2000	
Sb	121	1	nogas	102.155	102.155	1.41	637936	0.02	2000	
Ba	137	1	nogas	321.590	321.590	2.52	731097	0.04	2000	
Tl	205	1	nogas	100.385	100.385	9.44	1366165	0.01	2000	
Pb	208	1	nogas	105.620	105.620	8.58	1863761	0.01	2000	
U	238	1	nogas	0.284	0.284	17.99	6648	0.00	2000	
Na	23	2	He	324990.071	324990.071	2.11	558114205	0.06	200000	>LDR
Mg	24	2	He	83774.960	83774.960	1.07	83440902	0.10	200000	
Al	27	2	He	117.283	117.283	0.99	78613	0.15	2000	
K	39	2	He	12815.282	12815.282	0.19	15124427	0.08	200000	
Ca	43	2	He	98660.568	98660.568	0.87	281008	35.11	200000	
Ca	44	2	He	112596.084	112596.084	1.62	5278188	2.13	200000	
V	51	2	He	110.753	110.753	0.77	517765	0.02	2000	
Cr	52	2	He	106.907	106.907	2.04	518123	0.02	2000	
Mn	55	2	He	782.493	782.493	0.93	3305082	0.02	2000	
Fe	56	2	He	20745.327	20745.327	0.59	105710632	0.02	200000	
Co	59	2	He	104.514	104.514	0.45	597938	0.02	2000	
Ni	60	2	He	103.948	103.948	0.59	141523	0.07	2000	
Cu	63	2	He	104.264	104.264	0.68	344948	0.03	2000	
Zn	66	2	He	110.046	110.046	1.34	87059	0.13	2000	
As	75	2	He	136.395	136.395	0.75	84024	0.16	2000	
Sb	121	2	He	105.554	105.554	1.01	329447	0.03	2000	
Se	78	2	He	112.910	112.910	3.16	8238	1.37	2000	
Ti	47	2	He	112.059	112.059	2.28	25899	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1146980	2.34	1242233	92.33	70	120	
In	115	1	nogas	1231256	0.88	1329984	92.58	70	120	
Li	6	1	nogas	911331	0.69	1019193	89.42	70	120	
Bi	209	1	nogas	1047567	4.83	1120972	93.45	70	120	
Ge	72	2	He	425086	0.62	464162	91.58	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	323_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:38:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.255	0.931	419626	1.62	100	96.3	90	110	
B	11	1	nogas	510.801	1.063	1341971	1.80	500	102.2	90	110	
Al	27	1	nogas	103.615	1.268	1073073	2.46	100	103.6	90	110	
P	31	1	nogas	573.393	0.950	54885	3.89	500	114.7	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	101.244	1.666	98163	2.56	100	101.2	90	110	
Ni	60	1	nogas	101.065	0.843	263469	3.16	100	101.1	90	110	
Cu	63	1	nogas	101.167	0.845	620715	3.52	100	101.2	90	110	
Zn	66	1	nogas	101.894	0.653	180380	2.89	100	101.9	90	110	
Se	77	1	nogas	100.321	3.956	11681	1.79	100	100.3	90	110	
Se	82	1	nogas	105.750	1.843	10911	2.71	100	105.7	90	110	
Sr	88	1	nogas	89.928	1.725	1541341	3.23	100	89.9	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.816	1.854	327100	3.58	100	98.8	90	110	
Ag	107	1	nogas	100.200	1.772	762543	3.52	100	100.2	90	110	
Cd	111	1	nogas	99.976	1.937	159481	3.42	100	100.0	90	110	
Sn	118	1	nogas	100.022	1.850	479147	3.20	100	100.0	90	110	
Sb	121	1	nogas	103.076	0.887	630535	3.24	100	103.1	90	110	
Ba	137	1	nogas	101.495	1.723	230562	3.00	100	101.5	90	110	
Tl	205	1	nogas	95.459	6.012	1363196	3.99	100	95.5	90	110	
Pb	208	1	nogas	100.806	6.569	1865910	4.55	100	100.8	90	110	
U	238	1	nogas	86.720	6.835	2097460	4.82	100	86.7	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.033	0.542	1512172	1.22	100	97.0	90	110	
Ba	135	1	nogas	101.437	2.205	131478	3.77	100	101.4	90	110	
Tl	203	1	nogas	100.273	6.089	571131	4.07	100	100.3	90	110	
Na	23	2	He	10544.881	0.444	17850265	0.83	10000	105.4	90	110	
Mg	24	2	He	10450.870	1.115	10238902	1.71	10000	104.5	90	110	
Al	27	2	He	102.438	1.453	67742	0.82	100	102.4	90	110	
K	39	2	He	10262.617	1.523	11932345	1.72	10000	102.6	90	110	
Ca	43	2	He	10220.737	1.889	28661	2.41	10000	102.2	90	110	
Ca	44	2	He	10094.200	0.080	466073	0.69	10000	100.9	90	110	
V	51	2	He	100.569	0.696	462945	0.71	100	100.6	90	110	
Cr	52	2	He	101.547	0.812	484573	0.25	100	101.5	90	110	
Mn	55	2	He	101.467	0.446	421885	1.02	100	101.5	90	110	
Fe	56	2	He	10254.150	0.659	51400744	1.13	10000	102.5	90	110	
Co	59	2	He	101.611	1.077	571734	0.66	100	101.6	90	110	
Ni	60	2	He	100.035	0.218	133959	0.83	100	100.0	90	110	
Cu	63	2	He	100.739	1.198	327855	1.73	100	100.7	90	110	
Zn	66	2	He	100.294	1.281	78073	1.77	100	100.3	90	110	
As	75	2	He	100.468	0.912	60941	1.33	100	100.5	90	110	
Sb	121	2	He	103.813	0.417	318696	0.93	100	103.8	90	110	
Se	78	2	He	104.994	0.889	7543	0.31	100	105.0	90	110	
Ti	47	2	He	99.999	1.848	22734	2.45	100	100.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1123836	3.49	1242233	90.47	70	120	
In	115	1	nogas	1230161	1.74	1329984	92.49	70	120	
Li	6	1	nogas	855722	0.97	1019193	83.96	70	120	
Bi	209	1	nogas	1096797	2.08	1120972	97.84	70	120	
Ge	72	2	He	418081	0.61	464162	90.07	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	324_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:40:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.061	23.0	310	20.6	1	
B	11	1	nogas	45.501	7.2	142588	5.8	10	CCB Main CR1 Failed
Al	27	1	nogas	0.916	3.9	39748	1.3	5	
P	31	1	nogas	42.174	18.4	21772	1.3	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.323	11.7	457	7.7	2.5	
Ni	60	1	nogas	0.156	5.2	687	2.2	2.5	
Cu	63	1	nogas	0.033	74.5	2334	5.7	2	
Zn	66	1	nogas	0.393	26.5	1487	12.7	2.5	
Se	77	1	nogas	-16.034	-26.8	3217	9.4	2.5	
Se	82	1	nogas	0.501	41.1	143	14.5	2	
Sr	88	1	nogas	0.093	2.5	1957	2.8	2.5	
Mo	95	1	nogas	0.551	7.9	2034	8.1	2.5	
Ag	107	1	nogas	0.069	21.0	637	18.1	2.5	
Cd	111	1	nogas	0.061	57.9	97	58.8	1	
Sn	118	1	nogas	1.185	6.3	6675	5.6	5	
Sb	121	1	nogas	3.941	13.0	24725	12.6	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.096	33.4	270	25.9	2.5	
Tl	205	1	nogas	0.137	11.9	2034	16.0	1	
Pb	208	1	nogas	0.112	20.8	3040	18.8	2.5	
U	238	1	nogas	0.110	26.4	2684	31.6	2.5	
Na	23	2	He	147.893	0.2	283643	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	9.776	5.3	9970	3.7	100	
Al	27	2	He	1.096	9.3	2350	2.4	5	
K	39	2	He	13.344	5.1	113086	0.9	100	
Ca	43	2	He	20.703	102.0	87	67.6	100	
Ca	44	2	He	22.806	9.4	1737	5.9	100	
V	51	2	He	-0.379	-14.4	3953	5.3	2.5	
Cr	52	2	He	0.140	20.6	10807	0.9	2.5	
Mn	55	2	He	0.184	12.6	1150	9.4	2.5	
Fe	56	2	He	8.761	2.6	60045	2.1	100	
Co	59	2	He	0.029	52.4	173	48.0	2.5	
Ni	60	2	He	0.062	81.2	213	30.1	2.5	
Cu	63	2	He	-0.071	-49.9	937	10.7	2	
Zn	66	2	He	0.430	21.4	680	11.5	2.5	
As	75	2	He	0.168	14.3	349	2.8	2.5	
Sb	121	2	He	2.966	1.7	9373	2.4	2	CCB Main CR1 Failed
Se	78	2	He	0.576	66.0	155	17.2	2	
Ti	47	2	He	0.304	68.8	77	61.6	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1114593	0.89	1242233	89.72	70	120	
In	115	1	nogas	1218829	1.10	1329984	91.64	70	120	
Li	6	1	nogas	910721	0.74	1019193	89.36	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1081754	5.35	1120972	96.50	70	120	
Ge	72	2	He	409748	1.30	464162	88.28	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	332_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:57:58-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.560	1.222	417719	1.68	100	96.6	90	110	
B	11	1	nogas	499.451	2.017	1302453	2.58	500	99.9	90	110	
Al	27	1	nogas	102.499	0.982	1053792	3.07	100	102.5	90	110	
P	31	1	nogas	591.968	3.646	55571	1.65	500	118.4	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	101.558	2.051	97693	1.92	100	101.6	90	110	
Ni	60	1	nogas	100.430	1.157	259788	3.15	100	100.4	90	110	
Cu	63	1	nogas	100.721	0.829	613181	3.27	100	100.7	90	110	
Zn	66	1	nogas	101.653	0.479	178592	3.52	100	101.7	90	110	
Se	77	1	nogas	130.665	2.436	13780	3.23	100	130.7	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	100.284	0.758	10277	4.41	100	100.3	90	110	
Sr	88	1	nogas	87.970	0.809	1519138	3.15	100	88.0	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	97.268	0.667	324385	3.18	100	97.3	90	110	
Ag	107	1	nogas	99.146	1.675	760373	4.51	100	99.1	90	110	
Cd	111	1	nogas	100.535	1.563	161598	3.92	100	100.5	90	110	
Sn	118	1	nogas	98.717	2.489	476710	5.49	100	98.7	90	110	
Sb	121	1	nogas	99.996	0.256	607102	3.85	100	100.0	90	110	
Ba	137	1	nogas	100.079	1.713	229074	3.59	100	100.1	90	110	
Tl	205	1	nogas	94.689	6.561	1391319	4.83	100	94.7	90	110	
Pb	208	1	nogas	100.356	6.391	1911570	4.73	100	100.4	90	110	
U	238	1	nogas	86.381	7.000	2150332	5.92	100	86.4	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	96.776	1.082	1496743	1.56	100	96.8	90	110	
Ba	135	1	nogas	101.315	2.055	132339	4.73	100	101.3	90	110	
Tl	203	1	nogas	98.797	7.349	578843	5.07	100	98.8	90	110	
Na	23	2	He	10362.992	0.739	17766021	0.82	10000	103.6	90	110	
Mg	24	2	He	10182.771	0.585	10102528	0.29	10000	101.8	90	110	
Al	27	2	He	101.295	1.896	67859	1.64	100	101.3	90	110	
K	39	2	He	10142.157	0.544	11943158	0.36	10000	101.4	90	110	
Ca	43	2	He	9941.223	1.045	28230	0.82	10000	99.4	90	110	
Ca	44	2	He	9995.090	0.584	467364	0.37	10000	100.0	90	110	
V	51	2	He	99.885	1.765	465671	1.46	100	99.9	90	110	
Cr	52	2	He	99.236	1.774	479822	1.74	100	99.2	90	110	
Mn	55	2	He	100.173	1.281	421787	0.91	100	100.2	90	110	
Fe	56	2	He	10253.932	0.748	52051294	0.32	10000	102.5	90	110	
Co	59	2	He	99.339	0.783	566068	0.54	100	99.3	90	110	
Ni	60	2	He	99.891	1.155	135466	1.32	100	99.9	90	110	
Cu	63	2	He	100.003	0.762	329588	0.35	100	100.0	90	110	
Zn	66	2	He	100.576	2.211	79282	2.10	100	100.6	90	110	
As	75	2	He	99.635	1.073	61206	1.36	100	99.6	90	110	
Sb	121	2	He	100.333	1.011	311937	0.76	100	100.3	90	110	
Se	78	2	He	102.189	2.988	7438	2.51	100	102.2	90	110	
Ti	47	2	He	98.840	3.018	22754	2.88	100	98.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1115293	3.96	1242233	89.78	70	120	
In	115	1	nogas	1239599	3.03	1329984	93.20	70	120	
Li	6	1	nogas	849137	0.61	1019193	83.31	70	120	
Bi	209	1	nogas	1128881	3.66	1120972	100.71	70	120	
Ge	72	2	He	423398	0.44	464162	91.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	333_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:00:09-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.054	55.0	272	49.4	1	
B	11	1	nogas	27.161	6.5	89690	5.3	10	CCB Main CR1 Failed
Al	27	1	nogas	0.787	1.4	37924	0.7	5	
P	31	1	nogas	68.446	7.9	23064	1.0	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.179	45.6	313	24.0	2.5	
Ni	60	1	nogas	0.054	132.6	417	43.1	2.5	
Cu	63	1	nogas	-0.059	-74.2	1750	14.6	2	
Zn	66	1	nogas	0.274	30.5	1260	11.4	2.5	
Se	77	1	nogas	7.748	13.2	4861	2.0	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.155	138.9	107	19.5	2	
Sr	88	1	nogas	0.084	7.9	1827	5.8	2.5	
Mo	95	1	nogas	0.375	25.9	1477	22.4	2.5	
Ag	107	1	nogas	0.036	13.9	390	8.9	2.5	
Cd	111	1	nogas	0.048	40.7	77	39.8	1	
Sn	118	1	nogas	0.828	13.1	5054	11.1	5	
Sb	121	1	nogas	3.136	18.0	19554	16.6	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.117	34.8	323	29.4	2.5	
Tl	205	1	nogas	0.125	26.9	1917	31.5	1	
Pb	208	1	nogas	0.092	36.9	2740	28.3	2.5	
U	238	1	nogas	0.104	37.8	2624	43.2	2.5	
Na	23	2	He	90.745	1.6	191073	1.0	100	
Mg	24	2	He	3.507	4.9	3997	4.0	100	
Al	27	2	He	1.495	27.3	2630	9.7	5	
K	39	2	He	6.581	15.4	106586	1.6	100	
Ca	43	2	He	8.524	106.6	53	47.2	100	
Ca	44	2	He	18.681	7.1	1567	3.3	100	
V	51	2	He	-0.014	-181.9	5644	1.4	2.5	
Cr	52	2	He	0.029	232.0	10410	2.4	2.5	
Mn	55	2	He	0.103	28.9	827	14.5	2.5	
Fe	56	2	He	5.746	4.7	45733	3.4	100	
Co	59	2	He	0.031	22.8	187	21.7	2.5	
Ni	60	2	He	0.062	59.0	217	22.8	2.5	
Cu	63	2	He	-0.142	-37.8	720	24.1	2	
Zn	66	2	He	0.286	35.4	577	13.5	2.5	
As	75	2	He	0.179	33.6	359	9.4	2.5	
Sb	121	2	He	2.086	6.2	6802	5.7	2	CCB Main CR1 Failed
Se	78	2	He	0.276	24.2	135	3.1	2	
Ti	47	2	He	0.079	142.4	27	94.4	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1099121	0.71	1242233	88.48	70	120	
In	115	1	nogas	1235177	0.92	1329984	92.87	70	120	
Li	6	1	nogas	888290	0.07	1019193	87.16	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1110858	5.56	1120972	99.10	70	120	
Ge	72	2	He	414155	0.68	464162	89.23	70	120	

Sample Report

Sample Table

Sample Name	HS23080101-01
Data File Name	339SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:13:12-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	0.002	0.002	308.48	37	0.01	2000	
B	11	1	nogas	67.183	67.183	1.07	194434	0.03	2000	
Al	27	1	nogas	9.717	9.717	7.62	120418	0.01	2000	
Ti	47	1	nogas	9.860	9.860	2.04	9073	0.11	2000	
Ni	60	1	nogas	1.782	1.782	5.12	4614	0.04	2000	
Cu	63	1	nogas	2.468	2.468	3.65	16132	0.02	2000	
Zn	66	1	nogas	5.490	5.490	0.33	9810	0.06	2000	
Se	77	1	nogas	146.919	146.919	2.53	14104	1.04	2000	
Se	82	1	nogas	3.332	3.332	7.85	407	0.82	2000	
Sr	88	1	nogas	320.124	320.124	0.59	5037827	0.01	2000	
Mo	95	1	nogas	0.097	0.097	43.17	503	0.02	2000	
Ag	107	1	nogas	0.018	0.018	20.32	237	0.01	2000	
Cd	111	1	nogas	0.005	0.005	173.21	7	0.07	2000	
Sn	118	1	nogas	0.158	0.158	32.29	1677	0.01	2000	
Sb	121	1	nogas	0.137	0.137	21.62	1583	0.01	2000	
Ba	137	1	nogas	152.107	152.107	2.71	317301	0.05	2000	
Tl	205	1	nogas	0.000	0.000	465.14	87	0.00	2000	
Pb	208	1	nogas	0.017	0.017	48.58	1103	0.00	2000	
U	238	1	nogas	0.060	0.060	35.62	1290	0.00	2000	
Na	23	2	He	847838.276	847838.276	2.75	1355167420	0.06	200000	>LDR
Mg	24	2	He	14655.220	14655.220	1.41	13587613	0.11	200000	
Al	27	2	He	9.179	9.179	10.96	7199	0.13	2000	
K	39	2	He	1920.684	1920.684	2.12	2190257	0.09	200000	
Ca	43	2	He	10314.074	10314.074	1.24	27372	37.68	200000	
Ca	44	2	He	10151.267	10151.267	1.68	443569	2.29	200000	
V	51	2	He	3.075	3.075	3.46	18679	0.02	2000	
Cr	52	2	He	1.629	1.629	8.05	17020	0.01	2000	
Mn	55	2	He	23.231	23.231	2.02	91704	0.03	2000	
Fe	56	2	He	28.835	28.835	4.05	153156	0.02	200000	
Co	59	2	He	0.115	0.115	18.69	623	0.02	2000	
Ni	60	2	He	0.484	0.484	14.93	740	0.07	2000	
Cu	63	2	He	0.867	0.867	2.05	3784	0.02	2000	
Zn	66	2	He	5.324	5.324	7.77	4244	0.13	2000	
As	75	2	He	0.892	0.892	6.96	751	0.12	2000	
Sb	121	2	He	0.132	0.132	9.09	830	0.02	2000	
Se	78	2	He	0.346	0.346	39.12	134	0.26	2000	
Ti	47	2	He	5.294	5.294	10.58	1147	0.46	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1051814	1.35	1242233	84.67	70	120	
In	115	1	nogas	1129848	0.46	1329984	84.95	70	120	
Li	6	1	nogas	874379	1.17	1019193	85.79	70	120	
Bi	209	1	nogas	934957	7.28	1120972	83.41	70	120	
Ge	72	2	He	395720	1.35	464162	85.25	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	344_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:24:24-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	95.952	1.858	417908	1.78	100	96.0	90	110	
B	11	1	nogas	486.707	2.185	1278232	2.31	500	97.3	90	110	
Al	27	1	nogas	103.286	0.833	1056501	3.32	100	103.3	90	110	
P	31	1	nogas	566.713	3.202	53754	1.26	500	113.3	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	101.579	1.676	97247	2.50	100	101.6	90	110	
Ni	60	1	nogas	100.929	1.414	259770	2.76	100	100.9	90	110	
Cu	63	1	nogas	100.511	1.125	608963	3.74	100	100.5	90	110	
Zn	66	1	nogas	100.988	2.320	176607	5.06	100	101.0	90	110	
Se	77	1	nogas	149.746	7.066	15065	1.96	100	149.7	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	101.068	1.874	10307	5.11	100	101.1	90	110	
Sr	88	1	nogas	89.666	1.932	1527262	3.32	100	89.7	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.508	2.367	324074	4.19	100	98.5	90	110	
Ag	107	1	nogas	99.899	2.568	755579	4.32	100	99.9	90	110	
Cd	111	1	nogas	99.857	3.842	158337	5.48	100	99.9	90	110	
Sn	118	1	nogas	98.686	2.022	469856	3.71	100	98.7	90	110	
Sb	121	1	nogas	99.352	2.162	600227	4.31	100	99.4	90	110	
Ba	137	1	nogas	100.903	3.352	227849	5.05	100	100.9	90	110	
Tl	205	1	nogas	93.399	7.165	1364816	4.66	100	93.4	90	110	
Pb	208	1	nogas	98.812	6.888	1871810	4.37	100	98.8	90	110	
U	238	1	nogas	85.801	7.658	2123553	5.13	100	85.8	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.287	1.237	1514594	1.40	100	97.3	90	110	
Ba	135	1	nogas	101.807	2.257	131142	4.06	100	101.8	90	110	
Tl	203	1	nogas	97.464	7.319	568061	4.90	100	97.5	90	110	
Na	23	2	He	10574.369	0.279	18014479	1.12	10000	105.7	90	110	
Mg	24	2	He	10386.377	1.990	10241331	2.84	10000	103.9	90	110	
Al	27	2	He	104.071	2.140	69232	1.57	100	104.1	90	110	
K	39	2	He	10409.716	2.294	12177114	1.10	10000	104.1	90	110	
Ca	43	2	He	10088.470	1.489	28467	0.92	10000	100.9	90	110	
Ca	44	2	He	10059.272	1.915	467366	0.81	10000	100.6	90	110	
V	51	2	He	100.773	1.026	466823	0.99	100	100.8	90	110	
Cr	52	2	He	100.221	1.145	481430	0.86	100	100.2	90	110	
Mn	55	2	He	100.228	1.115	419384	1.11	100	100.2	90	110	
Fe	56	2	He	10325.500	0.703	52086024	0.51	10000	103.3	90	110	
Co	59	2	He	100.649	0.815	569929	0.41	100	100.6	90	110	
Ni	60	2	He	99.461	0.932	134037	1.03	100	99.5	90	110	
Cu	63	2	He	100.948	0.645	330628	1.48	100	100.9	90	110	
Zn	66	2	He	102.154	1.250	80017	1.25	100	102.2	90	110	
As	75	2	He	99.504	1.416	60739	0.90	100	99.5	90	110	
Sb	121	2	He	101.024	0.528	312116	0.71	100	101.0	90	110	
Se	78	2	He	100.710	2.264	7286	1.46	100	100.7	90	110	
Ti	47	2	He	99.369	0.031	22734	1.25	100	99.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1109648	3.32	1242233	89.33	70	120	
In	115	1	nogas	1222510	1.92	1329984	91.92	70	120	
Li	6	1	nogas	854950	0.54	1019193	83.88	70	120	
Bi	209	1	nogas	1122791	2.70	1120972	100.16	70	120	
Ge	72	2	He	420759	1.22	464162	90.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	345_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:26:36-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.049	36.9	252	32.2	1	
B	11	1	nogas	18.888	6.3	67862	4.2	10	CCB Main CR1 Failed
Al	27	1	nogas	0.824	11.7	38121	2.8	5	
P	31	1	nogas	47.198	7.0	21676	0.4	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.173	23.4	307	11.5	2.5	
Ni	60	1	nogas	0.071	58.5	457	21.9	2.5	
Cu	63	1	nogas	-0.052	-76.3	1787	12.2	2	
Zn	66	1	nogas	0.239	8.7	1193	3.4	2.5	
Se	77	1	nogas	14.228	27.6	5298	6.2	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.525	104.1	143	38.4	2	
Sr	88	1	nogas	0.061	12.8	1403	10.0	2.5	
Mo	95	1	nogas	0.365	25.4	1410	22.0	2.5	
Ag	107	1	nogas	0.040	53.0	417	39.0	2.5	
Cd	111	1	nogas	0.064	26.5	100	26.5	1	
Sn	118	1	nogas	0.731	11.4	4487	9.4	5	
Sb	121	1	nogas	2.974	18.4	18499	16.6	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.083	29.2	240	23.2	2.5	
Tl	205	1	nogas	0.123	11.5	1867	16.7	1	
Pb	208	1	nogas	0.081	30.2	2507	23.2	2.5	
U	238	1	nogas	0.097	31.2	2420	36.4	2.5	
Na	23	2	He	88.773	3.1	187644	1.2	100	
Mg	24	2	He	3.800	7.1	4281	6.4	100	
Al	27	2	He	1.563	9.9	2674	5.3	5	
K	39	2	He	4.631	30.5	104291	0.7	100	
Ca	43	2	He	8.622	90.0	53	39.0	100	
Ca	44	2	He	14.049	24.3	1353	10.2	100	
V	51	2	He	0.101	55.8	6154	2.8	2.5	
Cr	52	2	He	0.107	82.9	10764	2.2	2.5	
Mn	55	2	He	0.108	14.6	847	7.9	2.5	
Fe	56	2	He	5.559	11.4	44814	8.7	100	
Co	59	2	He	0.026	21.9	160	21.7	2.5	
Ni	60	2	He	0.053	121.9	203	41.0	2.5	
Cu	63	2	He	-0.146	-12.7	707	8.0	2	
Zn	66	2	He	0.334	8.8	613	5.0	2.5	
As	75	2	He	0.185	11.7	362	2.7	2.5	
Sb	121	2	He	1.890	7.3	6208	8.4	2	
Se	78	2	He	0.315	60.4	138	10.0	2	
Ti	47	2	He	0.211	41.5	57	36.7	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1094045	1.00	1242233	88.07	70	120	
In	115	1	nogas	1208625	0.63	1329984	90.88	70	120	
Li	6	1	nogas	894547	0.58	1019193	87.77	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1099030	5.72	1120972	98.04	70	120	
Ge	72	2	He	413956	1.64	464162	89.18	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	346_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:28:50-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.362	1.406	415581	1.43	100	96.4	90	110	
B	11	1	nogas	491.508	2.013	1278104	2.57	500	98.3	90	110	
Al	27	1	nogas	103.250	1.135	1059319	2.88	100	103.2	90	110	
P	31	1	nogas	577.743	2.513	54604	1.78	500	115.5	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	100.736	1.432	96737	2.07	100	100.7	90	110	
Ni	60	1	nogas	100.257	0.704	258855	2.65	100	100.3	90	110	
Cu	63	1	nogas	101.238	0.349	615249	3.53	100	101.2	90	110	
Zn	66	1	nogas	102.287	0.417	179385	3.73	100	102.3	90	110	
Se	77	1	nogas	120.138	5.162	13003	5.31	100	120.1	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	104.737	0.591	10707	3.54	100	104.7	90	110	
Sr	88	1	nogas	89.130	0.839	1531325	2.87	100	89.1	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.061	2.069	325402	3.99	100	98.1	90	110	
Ag	107	1	nogas	99.520	1.634	759207	3.60	100	99.5	90	110	
Cd	111	1	nogas	99.894	2.784	159770	4.81	100	99.9	90	110	
Sn	118	1	nogas	99.291	0.853	476796	2.85	100	99.3	90	110	
Sb	121	1	nogas	100.329	1.057	608062	4.23	100	100.3	90	110	
Ba	137	1	nogas	100.877	1.236	229729	3.27	100	100.9	90	110	
Tl	205	1	nogas	94.741	6.586	1379342	4.15	100	94.7	90	110	
Pb	208	1	nogas	99.630	7.212	1880074	4.76	100	99.6	90	110	
U	238	1	nogas	86.061	7.217	2122162	4.80	100	86.1	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.933	1.245	1509257	1.08	100	97.9	90	110	
Ba	135	1	nogas	100.797	0.766	130950	2.79	100	100.8	90	110	
Tl	203	1	nogas	99.081	6.777	575368	4.50	100	99.1	90	110	
Na	23	2	He	10280.499	2.035	17702446	1.45	10000	102.8	90	110	
Mg	24	2	He	10098.505	0.982	10063692	0.80	10000	101.0	90	110	
Al	27	2	He	100.335	1.573	67532	0.95	100	100.3	90	110	
K	39	2	He	10093.335	0.391	11939334	0.34	10000	100.9	90	110	
Ca	43	2	He	9727.510	0.901	27749	1.53	10000	97.3	90	110	
Ca	44	2	He	9927.828	0.555	466315	1.06	10000	99.3	90	110	
V	51	2	He	99.546	0.704	466192	0.10	100	99.5	90	110	
Cr	52	2	He	99.158	0.766	481586	0.25	100	99.2	90	110	
Mn	55	2	He	100.590	0.532	425453	0.94	100	100.6	90	110	
Fe	56	2	He	10208.793	1.096	52054778	1.12	10000	102.1	90	110	
Co	59	2	He	99.902	0.854	571851	1.44	100	99.9	90	110	
Ni	60	2	He	99.134	1.796	135045	2.10	100	99.1	90	110	
Cu	63	2	He	100.456	0.283	332563	0.68	100	100.5	90	110	
Zn	66	2	He	102.979	0.331	81532	0.42	100	103.0	90	110	
As	75	2	He	98.595	0.511	60839	0.54	100	98.6	90	110	
Sb	121	2	He	101.020	0.331	315478	0.33	100	101.0	90	110	
Se	78	2	He	100.880	0.719	7378	1.27	100	100.9	90	110	
Ti	47	2	He	97.444	1.523	22534	1.62	100	97.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1113106	3.33	1242233	89.61	70	120	
In	115	1	nogas	1233142	2.04	1329984	92.72	70	120	
Li	6	1	nogas	846596	1.23	1019193	83.07	70	120	
Bi	209	1	nogas	1118623	3.07	1120972	99.79	70	120	
Ge	72	2	He	425293	0.63	464162	91.63	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	347_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:31:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.050	28.5	253	24.7	1	
B	11	1	nogas	19.949	8.7	70174	6.1	10	CCB Main CR1 Failed
Al	27	1	nogas	0.828	9.6	38064	2.1	5	
P	31	1	nogas	49.271	5.7	21749	1.0	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.177	42.2	310	22.6	2.5	
Ni	60	1	nogas	0.069	95.8	453	37.0	2.5	
Cu	63	1	nogas	-0.056	-20.1	1760	3.5	2	
Zn	66	1	nogas	0.330	8.2	1347	3.3	2.5	
Se	77	1	nogas	2.328	172.2	4444	6.1	2.5	
Se	82	1	nogas	0.430	133.0	133	42.6	2	
Sr	88	1	nogas	0.054	21.5	1297	16.3	2.5	
Mo	95	1	nogas	0.404	27.3	1547	24.2	2.5	
Ag	107	1	nogas	0.034	31.8	373	22.8	2.5	
Cd	111	1	nogas	0.057	72.0	90	72.9	1	
Sn	118	1	nogas	0.853	14.4	5084	12.1	5	
Sb	121	1	nogas	3.292	13.0	20358	12.3	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.089	24.6	253	20.3	2.5	
Tl	205	1	nogas	0.128	8.5	1917	13.7	1	
Pb	208	1	nogas	0.082	32.8	2523	26.2	2.5	
U	238	1	nogas	0.102	40.4	2544	45.8	2.5	
Na	23	2	He	73.753	1.3	161119	0.7	100	
Mg	24	2	He	3.135	11.3	3604	10.2	100	
Al	27	2	He	1.345	30.1	2514	11.5	5	
K	39	2	He	5.770	39.2	104656	1.9	100	
Ca	43	2	He	8.695	21.5	53	10.8	100	
Ca	44	2	He	8.311	11.5	1083	4.7	100	
V	51	2	He	-0.208	-16.8	4724	3.7	2.5	
Cr	52	2	He	0.071	56.6	10504	1.5	2.5	
Mn	55	2	He	0.114	6.5	863	2.4	2.5	
Fe	56	2	He	5.789	9.3	45516	6.3	100	
Co	59	2	He	0.026	11.6	157	9.8	2.5	
Ni	60	2	He	0.046	65.9	193	19.6	2.5	
Cu	63	2	He	-0.105	-23.3	830	10.7	2	
Zn	66	2	He	0.329	32.6	603	13.5	2.5	
As	75	2	He	0.098	20.2	308	3.5	2.5	
Sb	121	2	He	2.267	6.8	7285	6.9	2	CCB Main CR1 Failed
Se	78	2	He	0.431	70.6	145	13.3	2	
Ti	47	2	He	0.065	78.7	23	49.5	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1091376	0.25	1242233	87.86	70	120	
In	115	1	nogas	1214372	0.93	1329984	91.31	70	120	
Li	6	1	nogas	887502	0.86	1019193	87.08	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1093319	5.86	1120972	97.53	70	120	
Ge	72	2	He	410290	1.39	464162	88.39	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV2
Data File Name	349LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:35:31-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	1.840	1.700	8392	1.45	2	92.0	70	120	
B	11	1	nogas	22.991	1.300	78828	0.26	10	229.9	70	120	NewName Main CR1 Failed
Al	27	1	nogas	1.779	2.995	47567	1.92	2	88.9	70	120	
P	31	1	nogas	47.976	10.051	21769	1.26	10	479.8	70	120	NewName Main CR1 Failed
Ti	47	1	nogas	1.963	7.715	2000	8.23	2	98.2	70	120	
Ni	60	1	nogas	2.137	4.918	5711	5.76	2	106.9	70	120	
Cu	63	1	nogas	1.889	1.131	13370	2.14	2	94.5	70	120	
Zn	66	1	nogas	2.100	3.696	4397	4.34	2	105.0	70	120	
Se	77	1	nogas	3.364	87.277	4541	6.30	2	168.2	70	120	NewName Main CR1 Failed
Se	82	1	nogas	2.298	42.887	320	30.14	2	114.9	70	120	
Sr	88	1	nogas	1.805	2.195	30799	2.82	2	90.2	70	120	
Mo	95	1	nogas	1.935	4.999	6522	5.23	2	96.8	70	120	
Ag	107	1	nogas	2.015	6.383	15195	6.29	2	100.7	70	120	
Cd	111	1	nogas	1.988	4.425	3120	5.09	2	99.4	70	120	
Sn	118	1	nogas	2.071	4.591	10791	3.92	2	103.5	70	120	
Sb	121	1	nogas	2.288	7.082	14474	7.22	2	114.4	70	120	
Ba	137	1	nogas	2.018	1.779	4564	2.04	2	100.9	70	120	
Tl	205	1	nogas	1.882	7.795	27050	3.70	2	94.1	70	120	
Pb	208	1	nogas	1.991	8.318	37938	3.91	2	99.6	70	120	
Pb	206	1	nogas	1.924	4.282	9243	2.63	2	96.2	70	120	
Pb	207	1	nogas	2.034	10.557	8463	5.87	2	101.7	70	120	
U	238	1	nogas	1.660	8.756	40298	4.54	2	83.0	70	120	
Li	7	1	nogas	1.875	4.267	92512	1.25	2	93.7	70	120	
Ba	135	1	nogas	1.940	7.263	2497	7.28	2	97.0	70	120	
Tl	203	1	nogas	1.975	8.565	11302	4.14	2	98.8	70	120	
Na	23	2	He	256.277	0.609	464590	0.40	200	128.1	70	120	NewName Main CR1 Failed
Mg	24	2	He	191.978	0.674	185514	0.47	200	96.0	70	120	
Al	27	2	He	2.409	22.515	3190	10.62	2	120.5	70	120	NewName Main CR1 Failed
K	39	2	He	183.728	1.903	306625	1.16	200	91.9	70	120	
Ca	43	2	He	201.117	10.035	583	9.44	200	100.6	70	120	
Ca	44	2	He	208.347	2.316	10154	2.39	200	104.2	70	120	
V	51	2	He	1.892	3.354	14122	1.80	2	94.6	70	120	
Cr	52	2	He	2.084	4.280	19773	2.32	2	104.2	70	120	
Mn	55	2	He	1.990	5.530	8529	5.48	2	99.5	70	120	
Fe	56	2	He	183.557	0.613	921510	0.56	200	91.8	70	120	
Co	59	2	He	2.126	3.202	11775	2.95	2	106.3	70	120	
Ni	60	2	He	2.195	2.434	3020	2.07	2	109.8	70	120	
Cu	63	2	He	1.843	3.430	7042	2.98	2	92.1	70	120	
Zn	66	2	He	2.064	11.939	1927	9.66	2	103.2	70	120	
As	75	2	He	1.981	2.831	1427	2.08	2	99.0	70	120	
Se	77	2	He	2.689	35.957	113	18.37	2	134.5	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.430	3.400	7789	3.23	2	121.5	70	120	NewName Main CR1 Failed
Se	78	2	He	2.035	18.871	257	10.17	2	101.8	70	120	
Ti	47	2	He	2.229	16.375	507	15.83	2	111.4	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1096433	1.73	1242233	88.26	70	120	
In	115	1	nogas	1210288	0.73	1329984	91.00	70	120	
Li	6	1	nogas	892571	0.77	1019193	87.58	70	120	
Bi	209	1	nogas	1101770	4.74	1120972	98.29	70	120	
Ge	72	2	He	411102	0.26	464162	88.57	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV5
Data File Name	350LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:37:46-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.549	1.772	20946	1.96	5	91.0	70	130	
B	11	1	nogas	34.624	0.767	111578	0.61	25	138.5	70	130	NewName Main CR1 Failed
Al	27	1	nogas	4.770	2.430	77629	2.19	5	95.4	70	130	
P	31	1	nogas	87.141	25.480	24362	6.21	25	348.6	70	130	NewName Main CR1 Failed
Ti	47	1	nogas	5.016	4.373	4928	4.50	5	100.3	70	130	
Ni	60	1	nogas	4.948	1.180	12966	1.14	5	99.0	70	130	
Cu	63	1	nogas	4.927	2.507	31781	3.11	5	98.5	70	130	
Zn	66	1	nogas	5.035	4.035	9530	3.91	5	100.7	70	130	
Se	77	1	nogas	10.495	24.758	5088	2.85	5	209.9	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.412	17.109	637	14.08	5	108.2	70	130	
Sr	88	1	nogas	4.455	2.939	76106	2.80	5	89.1	70	130	
Mo	95	1	nogas	4.893	2.007	16286	2.59	5	97.9	70	130	
Ag	107	1	nogas	4.966	1.383	37606	1.35	5	99.3	70	130	
Cd	111	1	nogas	4.890	3.833	7742	4.97	5	97.8	70	130	
Sn	118	1	nogas	4.867	3.110	24144	3.21	5	97.3	70	130	
Sb	121	1	nogas	5.050	1.465	31214	2.26	5	101.0	70	130	
Ba	137	1	nogas	4.920	1.773	11141	2.11	5	98.4	70	130	
Tl	205	1	nogas	4.681	9.884	67138	3.73	5	93.6	70	130	
Pb	208	1	nogas	4.849	8.973	91037	3.23	5	97.0	70	130	
U	238	1	nogas	4.174	7.820	101410	1.58	5	83.5	70	130	
Li	7	1	nogas	4.542	2.374	135643	1.06	5	90.8	70	130	
Na	23	2	He	528.036	0.953	931118	0.33	500	105.6	70	130	
Mg	24	2	He	466.104	0.410	457033	0.34	500	93.2	70	130	
Al	27	2	He	4.928	4.530	4868	2.89	5	98.6	70	130	
K	39	2	He	449.696	0.500	618254	0.61	500	89.9	70	130	
Ca	43	2	He	516.863	7.744	1477	7.05	500	103.4	70	130	
Ca	44	2	He	518.020	3.498	24590	2.93	500	103.6	70	130	
V	51	2	He	4.953	1.450	28263	0.57	5	99.1	70	130	
Cr	52	2	He	5.055	3.165	33965	1.69	5	101.1	70	130	
Mn	55	2	He	5.211	0.993	22046	0.41	5	104.2	70	130	
Fe	56	2	He	444.887	0.779	2245802	0.59	500	89.0	70	130	
Co	59	2	He	5.083	3.457	28604	2.91	5	101.7	70	130	
Ni	60	2	He	5.155	6.995	7028	6.71	5	103.1	70	130	
Cu	63	2	He	5.113	1.465	17757	1.42	5	102.3	70	130	
Zn	66	2	He	5.009	8.592	4241	8.35	5	100.2	70	130	
As	75	2	He	4.689	3.208	3086	3.43	5	93.8	70	130	
Sb	121	2	He	5.134	1.925	16203	1.60	5	102.7	70	130	
Se	78	2	He	5.339	10.312	495	8.43	5	106.8	70	130	
Ti	47	2	He	5.262	19.715	1203	19.07	5	105.2	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1106309	0.84	1242233	89.06	70	120	
In	115	1	nogas	1220757	1.34	1329984	91.79	70	120	
Li	6	1	nogas	902654	0.22	1019193	88.57	70	120	
Bi	209	1	nogas	1103950	6.54	1120972	98.48	70	120	
Ge	72	2	He	417931	0.59	464162	90.04	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	351ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:40:00-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.013	27.4	80	18.8	0	ICSA Main CR1 Failed
B	11	1	nogas	15.050	4.7	52704	2.8	0	ICSA Main CR1 Failed
Al	27	1	nogas	115422.002	0.8	1074781131	0.8	0	
P	31	1	nogas	1007988.056	0.6	57839112	1.0	0	
Ti	47	1	nogas	2119.775	1.1	1900103	1.9	0	
Ni	60	1	nogas	1.476	11.9	3824	11.3	0	ICSA Main CR1 Failed
Cu	63	1	nogas	0.594	3.4	5354	1.3	0	ICSA Main CR1 Failed
Zn	66	1	nogas	3.469	2.5	6405	2.8	0	ICSA Main CR1 Failed
Se	77	1	nogas	9.947	9.8	4748	1.7	0	
Se	82	1	nogas	0.531	22.4	137	8.4	0	ICSA Main CR1 Failed
Sr	88	1	nogas	4.198	2.1	64722	1.7	0	ICSA Main CR1 Failed
Mo	95	1	nogas	2424.089	1.4	7176886	0.5	0	
Ag	107	1	nogas	0.163	2.4	1217	2.1	0	ICSA Main CR1 Failed
Cd	111	1	nogas	2.653	8.6	3787	8.5	0	
Sn	118	1	nogas	0.230	16.9	1944	9.2	0	ICSA Main CR1 Failed
Sb	121	1	nogas	0.736	4.2	4948	2.8	0	ICSA Main CR1 Failed
Ba	137	1	nogas	0.691	10.4	1453	9.5	0	ICSA Main CR1 Failed
Tl	205	1	nogas	0.033	13.9	503	11.3	0	ICSA Main CR1 Failed
Pb	208	1	nogas	0.175	6.4	3764	1.2	0	ICSA Main CR1 Failed
Na	23	2	He	109729.930	0.9	170642424	0.9	0	
Mg	24	2	He	109914.027	0.8	99123455	1.6	0	
Al	27	2	He	117228.559	0.9	69584337	0.5	0	
K	39	2	He	107759.377	0.6	114464438	1.4	0	
Ca	43	2	He	98916.283	0.7	255076	0.7	0	
Ca	44	2	He	118760.282	0.2	5040584	0.9	0	
V	51	2	He	-0.158	-29.3	4639	3.3	0	ICSA Main CR1 Failed
Cr	52	2	He	1.559	5.0	16249	1.5	0	ICSA Main CR1 Failed
Mn	55	2	He	0.827	4.0	3537	3.1	0	ICSA Main CR1 Failed
Fe	56	2	He	107172.077	1.1	494344966	0.4	0	
Co	59	2	He	0.532	3.4	2770	2.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.969	11.6	1317	9.9	0	ICSA Main CR1 Failed
Cu	63	2	He	0.179	19.2	1627	6.6	0	ICSA Main CR1 Failed
Zn	66	2	He	2.539	6.9	2144	6.6	0	ICSA Main CR1 Failed
As	75	2	He	0.398	20.0	456	9.8	0	ICSA Main CR1 Failed
Sb	121	2	He	0.641	12.0	2244	9.5	0	ICSA Main CR1 Failed
Se	78	2	He	0.095	242.9	114	13.7	0	ICSA Main CR1 Failed
Ti	47	2	He	2100.995	0.6	439491	0.9	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1040131	0.83	1242233	83.73	70	120	
In	115	1	nogas	1101325	0.92	1329984	82.81	70	120	
Li	6	1	nogas	820654	0.59	1019193	80.52	70	120	
Bi	209	1	nogas	979808	5.50	1120972	87.41	70	120	
Ge	72	2	He	384862	0.86	464162	82.92	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	352ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:42:13-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	95.619	0.016	386044	1.75	100	95.6	80	120	
B	11	1	nogas	492.976	0.843	1199975	2.30	100	493.0	80	120	
Al	27	1	nogas	110602.246	3.069	1058555504	0.47	100	110602.2	80	120	ICSB Main CR1 Failed
Ti	47	1	nogas	2206.329	0.426	2033854	3.22	100	2206.3	80	120	
Ni	60	1	nogas	94.526	0.771	234610	3.49	100	94.5	80	120	
Cu	63	1	nogas	92.598	0.518	541031	3.69	100	92.6	80	120	
Zn	66	1	nogas	98.528	1.078	166046	2.51	100	98.5	80	120	
Se	77	1	nogas	131.643	4.040	13293	5.29	100	131.6	80	120	ICSB Main CR1 Failed
Se	82	1	nogas	103.736	3.387	10200	6.68	100	103.7	80	120	
Sr	88	1	nogas	95.436	1.559	1501900	3.83	100	95.4	80	120	
Mo	95	1	nogas	2474.095	1.850	7510318	0.64	100	2474.1	80	120	ICSB Main CR1 Failed
Ag	107	1	nogas	94.977	1.835	663658	4.12	100	95.0	80	120	
Cd	111	1	nogas	101.820	1.785	149137	4.07	100	101.8	80	120	
Sn	118	1	nogas	101.927	1.755	448317	3.95	100	101.9	80	120	
Sb	121	1	nogas	105.841	1.141	616407	4.01	100	105.8	80	120	
Ba	137	1	nogas	104.547	2.079	218065	3.91	100	104.5	80	120	
Tl	205	1	nogas	94.001	6.416	1240346	5.34	100	94.0	80	120	
Pb	208	1	nogas	100.124	6.072	1712538	4.86	100	100.1	80	120	
U	238	1	nogas	89.071	6.380	1990722	5.19	100	89.1	80	120	
Na	23	2	He	113431.140	0.901	184856664	1.03	100	113431.1	80	120	ICSB Main CR1 Failed
Mg	24	2	He	112893.374	0.904	106683622	0.78	100	112893.4	80	120	ICSB Main CR1 Failed
Al	27	2	He	109606.195	0.635	68181057	0.74	100	109606.2	80	120	ICSB Main CR1 Failed
K	39	2	He	110901.876	0.256	123440775	0.10	100	110901.9	80	120	ICSB Main CR1 Failed
Ca	43	2	He	106509.249	0.478	287826	0.61	100	106509.2	80	120	ICSB Main CR1 Failed
Ca	44	2	He	122447.254	1.391	5446121	1.42	100	122447.3	80	120	ICSB Main CR1 Failed
V	51	2	He	98.876	0.344	439166	0.50	100	98.9	80	120	
Cr	52	2	He	98.708	0.625	454679	0.76	100	98.7	80	120	
Mn	55	2	He	98.056	0.297	393300	0.32	100	98.1	80	120	
Fe	56	2	He	111920.838	0.489	541018125	0.33	100	111920.8	80	120	ICSB Main CR1 Failed
Co	59	2	He	97.907	1.478	531443	1.46	100	97.9	80	120	
Ni	60	2	He	95.138	0.947	122903	0.86	100	95.1	80	120	
Cu	63	2	He	95.404	0.680	299567	0.63	100	95.4	80	120	
Zn	66	2	He	101.676	1.693	76344	1.78	100	101.7	80	120	
As	75	2	He	101.228	1.316	59229	1.46	100	101.2	80	120	
Sb	121	2	He	106.119	1.543	314253	1.70	100	106.1	80	120	
Se	78	2	He	102.603	0.670	7114	0.50	100	102.6	80	120	
Ti	47	2	He	2146.047	0.785	470435	0.92	100	2146.0	80	120	ICSB Main CR1 Failed

QC ISTD Table

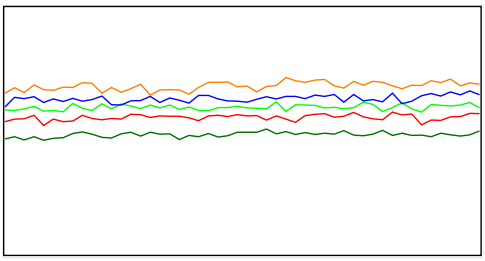
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1069812	3.51	1242233	86.12	70	120	
In	115	1	nogas	1129414	2.29	1329984	84.92	70	120	
Li	6	1	nogas	792496	1.74	1019193	77.76	70	120	
Bi	209	1	nogas	1013234	2.37	1120972	90.39	70	120	
Ge	72	2	He	403306	0.16	464162	86.89	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq. Date-Time	8/4/2023 9:35:59 AM
Report Comment	---
Instrument Name	G3281A JP11080910

[nogas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	10000	5549	55494.96		
24	20000	11919	119194.49		
59	20000	12623	126234.55		
115	20000	13648	136483.65		
208	20000	9695	96952.67		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.203	5.000	
24	1.860	5.000	
59	2.281	5.000	
115	2.538	5.000	
208	2.139	5.000	

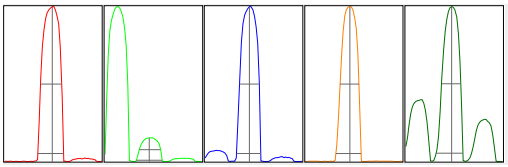
Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.200		
59	0.500		
115	1.400		
208	1.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.863 %
Doubly Charged	70 / 140 1.590 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	5592.48	9.00	8.90 - 9.10	
24	12120.17	23.90	23.90 - 24.10	
59	13071.82	58.90	58.90 - 59.10	
115	14085.53	114.90	114.90 - 115.10	
208	9992.10	207.95	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.786		
24	0.65	0.785		
59	0.61	0.739		
115	0.58	0.772		
208	0.58	0.819		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.45 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	---
RF Matching	1.70 V	Nebulizer Pump	0.10 rps	Plasma Gas	---
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.0 V	Deflect	14.0 V
Extract 2	-190.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	127	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.5 mm

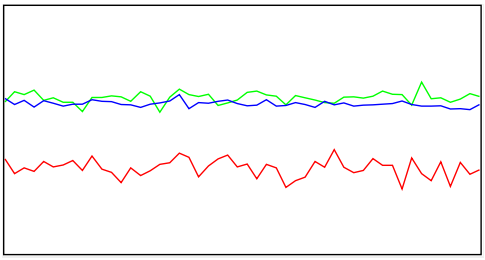
EM

Discriminator	4.5 mV	Analog HV	1598 V	Pulse HV	1301 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

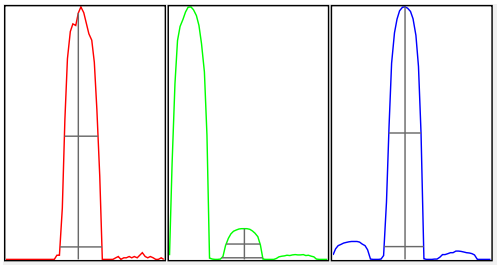
Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	500	172	1724.30		
24	2000	1261	12613.52		
59	10000	6055	60546.15		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	10.456	5.000	Fail
24	3.462	5.000	
59	1.960	5.000	

Mass	Background	Background (Required)	Background (Flag)
9			
24			
59			

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	177.27	8.90	8.90 - 9.10	
24	1254.31	23.95	23.90 - 24.10	
59	6162.49	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.784		
24	0.63	0.769		
59	0.60	0.737		

Tune Parameters

Plasma Parameters

Tune Check Report

Plasma Mode	---	Nebulizer Gas	0.45 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	---
RF Matching	1.70 V	Nebulizer Pump	0.10 rps	Plasma Gas	---
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.0 V	Deflect	0.4 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.4 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	127	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.5 mm		

EM

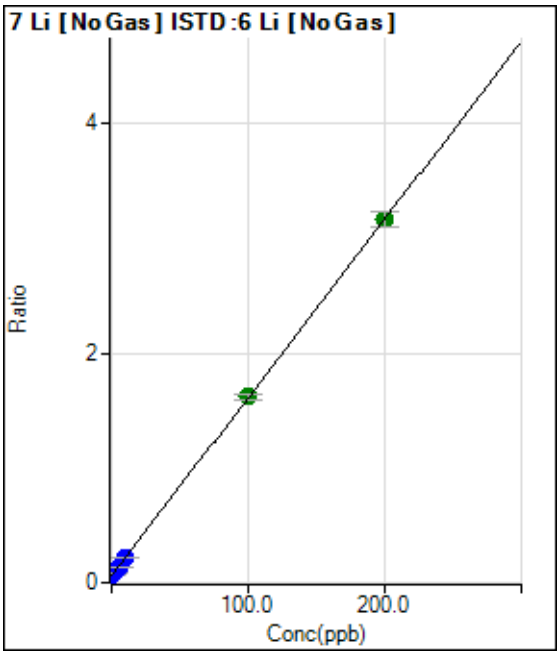
Discriminator	4.5 mV	Analog HV	1598 V	Pulse HV	1301 V

Calibration for 192_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080723A.b\
Analysis File: 080723A.batch.bin
DA Date-Time: 8/7/2023 10:09:58 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	185CALB.d	CAL BLK	8/7/2023 7:35:40 PM
2	186CALS.d	2/10/200	8/7/2023 7:37:38 PM
3	187CALS.d	5/25/500	8/7/2023 7:39:34 PM
4	188CALS.d	10/50/100	8/7/2023 7:41:31 PM
5	189CALS.d	100/500/10K	8/7/2023 7:43:27 PM
6	190CALS.d	200/1000/20K	8/7/2023 7:45:40 PM

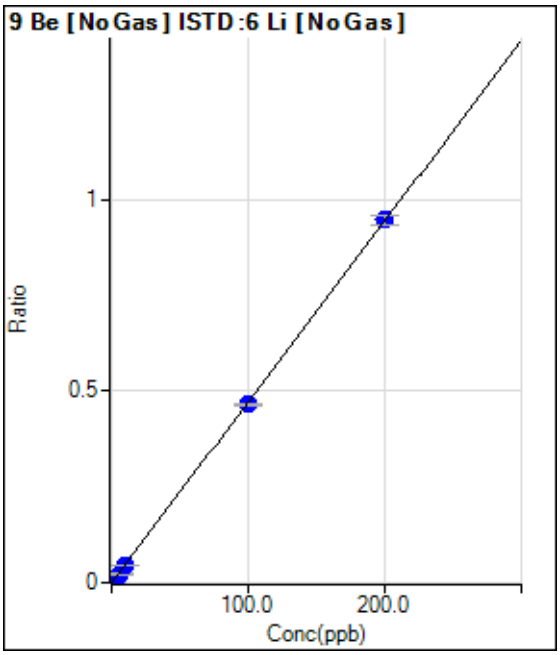
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33324.52	0.0601	P	0.8
2	☐	2.000	1.851	49043.60	0.0888	P	1.2
3	☐	5.000	4.782	73985.21	0.1343	P	1.9
4	☐	10.000	10.134	116537.04	0.2173	P	1.4
5	☐	100.000	100.399	841168.56	1.6177	A	2.9
6	☐	200.000	199.801	1569865.76	3.1597	A	4.1

y = 0.0155 * x + 0.0601
R = 1.0000
DL = 0.09653
BEC = 3.874

Weight: <None>
Min Conc: <None>

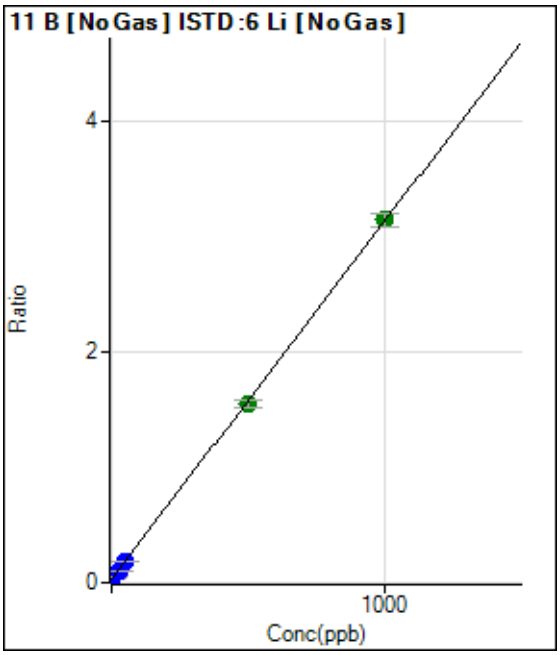


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21.67	0.0000	P	57.7
2	☐	2.000	1.975	5169.32	0.0094	P	1.1
3	☐	5.000	4.778	12445.60	0.0226	P	2.7
4	☐	10.000	9.691	24549.85	0.0458	P	2.1
5	☐	100.000	98.555	241927.36	0.4652	P	1.3
6	☐	200.000	200.744	470829.78	0.9475	P	2.3

y = 0.0047 * x + 3.8978E-005
R = 1.0000
DL = 0.0143
BEC = 0.008258

Weight: <None>
Min Conc: <None>

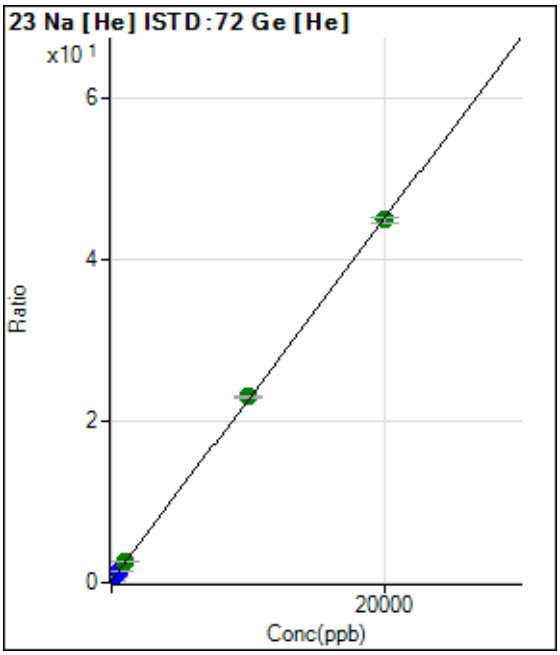
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16458.11	0.0297	P	1.8
2	☐	10.000	9.454	32561.09	0.0590	P	2.9
3	☐	25.000	23.062	55735.64	0.1012	P	2.5
4	☐	50.000	48.097	95858.36	0.1787	P	1.2
5	☐	500.000	491.927	808261.76	1.5543	A	4.4
6	☐	1000.000	1004.186	1560887.79	3.1420	A	3.6

y = 0.0031 * x + 0.0297
R = 1.0000
DL = 0.5177
BEC = 9.576

Weight: <None>
Min Conc: <None>

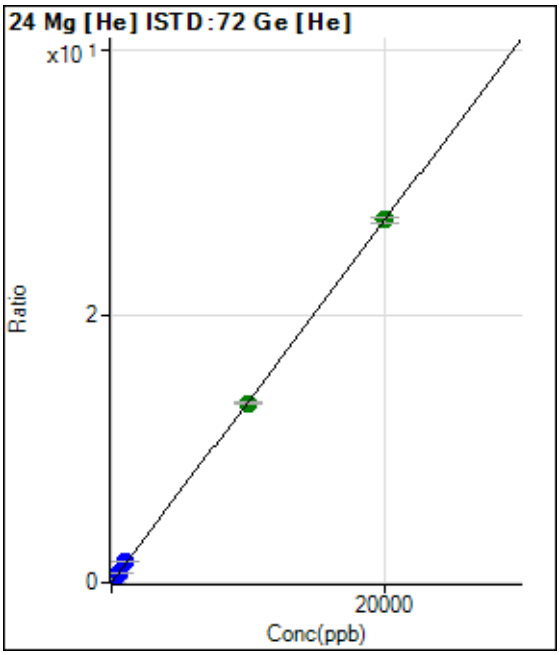


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102678.74	0.2362	P	1.1
2	☐	200.000	216.346	314737.28	0.7211	P	1.4
3	☐	500.000	539.938	625217.69	1.4464	P	1.5
4	☐	1000.000	1068.390	1126311.80	2.6308	A	0.4
5	☐	10000.000	10140.443	9779896.73	22.9642	A	0.8
6	☐	20000.000	19925.197	18731648.89	44.8949	A	1.9

y = 0.0022 * x + 0.2362
R = 1.0000
DL = 3.474
BEC = 105.4

Weight: <None>
Min Conc: <None>

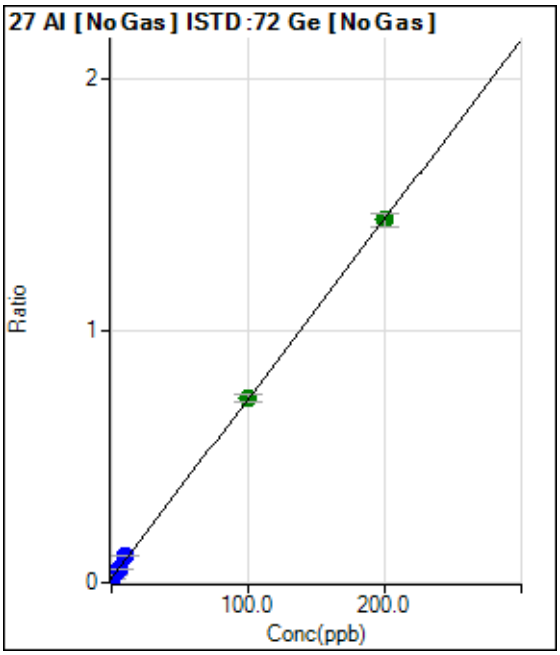
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1320.09	0.0030	P	4.9
2	☐	200.000	225.299	134892.26	0.3091	P	1.3
3	☐	500.000	553.914	326548.47	0.7555	P	1.9
4	☐	1000.000	1133.552	660527.10	1.5429	P	0.7
5	☐	10000.000	9920.432	5740332.00	13.4790	A	2.0
6	☐	20000.000	20031.505	11354204.83	27.2138	A	1.8

y = 0.0014 * x + 0.0030
R = 1.0000
DL = 0.3278
BEC = 2.236

Weight: <None>
Min Conc: <None>

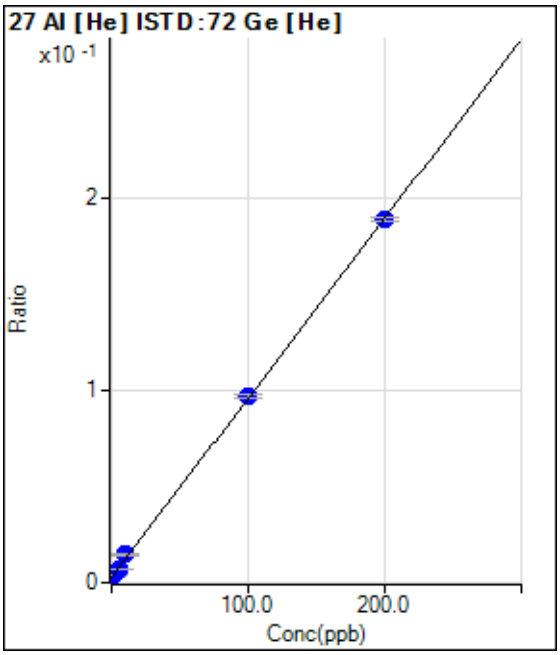


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25911.23	0.0169	P	4.0
2	☐	2.000	2.044	48610.30	0.0314	P	3.3
3	☐	5.000	4.775	79313.71	0.0509	P	2.0
4	☐	10.000	12.405	162108.99	0.1052	P	2.5
5	☐	100.000	100.581	1110941.52	0.7333	A	3.9
6	☐	200.000	199.594	2153042.10	1.4385	A	4.0

y = 0.0071 * x + 0.0169
R = 0.9999
DL = 0.2816
BEC = 2.369

Weight: <None>
Min Conc: <None>

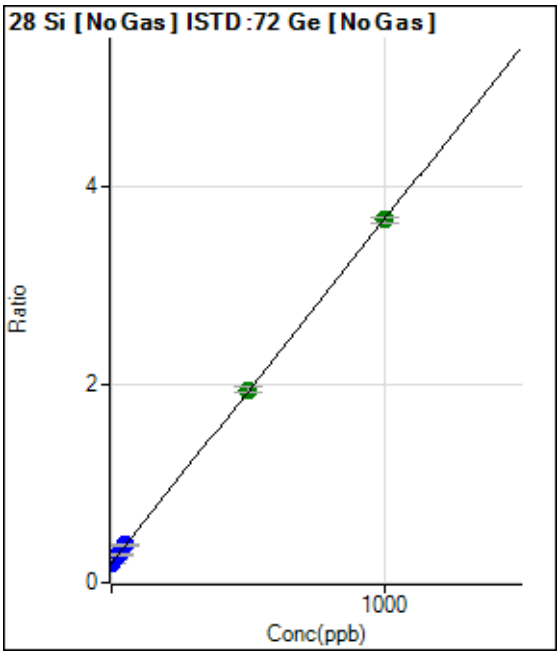
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1176.74	0.0027	P	13.0
2	☐	2.000	1.707	1876.82	0.0043	P	3.4
3	☐	5.000	4.502	2987.04	0.0069	P	3.4
4	☐	10.000	12.894	6308.25	0.0147	P	3.9
5	☐	100.000	100.951	41268.35	0.0969	P	2.6
6	☐	200.000	199.395	78766.25	0.1888	P	1.2

y = 9.3308E-004 * x + 0.0027
R = 0.9999
DL = 1.134
BEC = 2.901

Weight: <None>
Min Conc: <None>

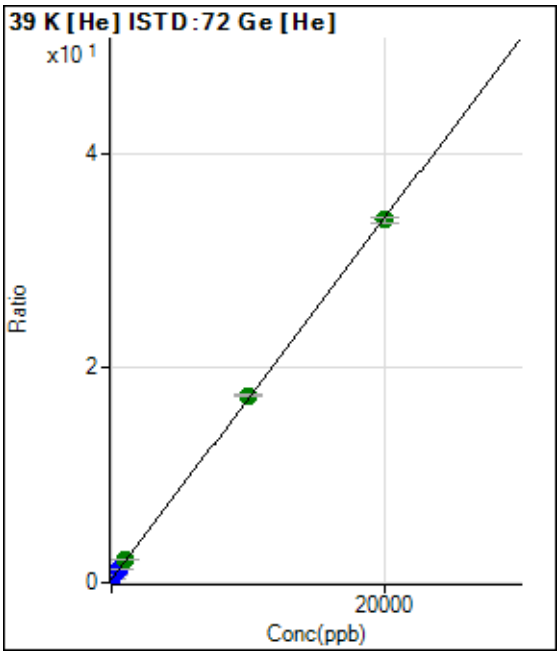


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	304063.85	0.1980	P	3.6
2	☐	10.000	10.462	362136.44	0.2343	P	0.8
3	☐	25.000	24.471	440752.31	0.2828	P	2.2
4	☐	50.000	52.009	582693.36	0.3782	P	1.3
5	☐	500.000	503.460	2942972.35	1.9422	A	2.8
6	☐	1000.000	998.178	5473950.96	3.6561	A	1.7

y = 0.0035 * x + 0.1980
R = 1.0000
DL = 6.089
BEC = 57.16

Weight: <None>
Min Conc: <None>

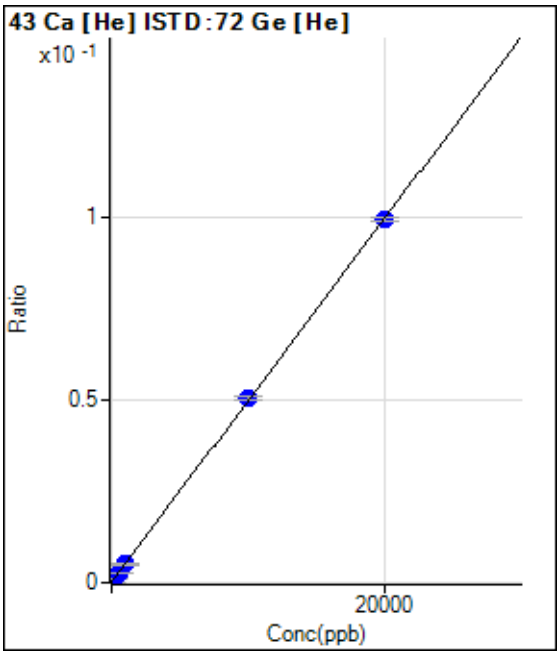
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	137849.07	0.3171	P	0.2
2	☐	200.000	212.671	294558.02	0.6749	P	1.4
3	☐	500.000	530.065	522568.96	1.2089	P	1.4
4	☐	1000.000	1080.622	913889.67	2.1352	A	3.6
5	☐	10000.000	10162.232	7416377.39	17.4143	A	0.9
6	☐	20000.000	19913.975	14110901.04	33.8208	A	1.7

y = 0.0017 * x + 0.3171
R = 1.0000
DL = 1.329
BEC = 188.5

Weight: <None>
Min Conc: <None>

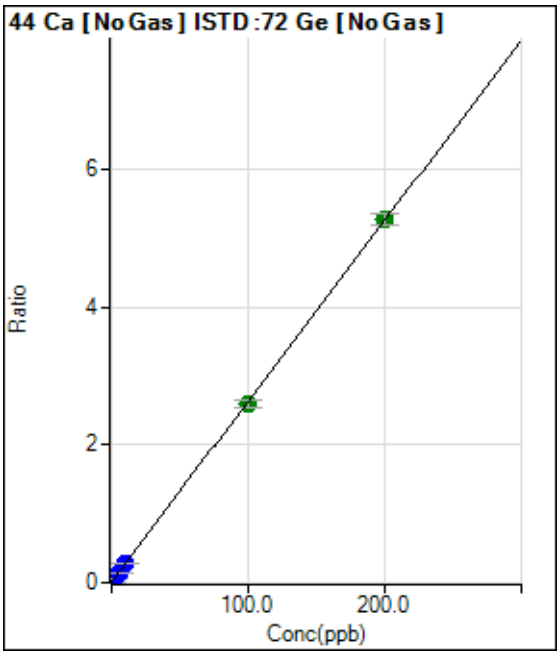


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40.00	0.0001	P	0.8
2	☐	200.000	163.956	396.68	0.0009	P	15.3
3	☐	500.000	504.744	1126.73	0.0026	P	9.3
4	☐	1000.000	1035.236	2246.89	0.0052	P	9.4
5	☐	10000.000	10129.406	21530.48	0.0506	P	1.8
6	☐	20000.000	19933.777	41476.41	0.0994	P	1.0

y = 4.9819E-006 * x + 9.2023E-005
R = 1.0000
DL = 0.4365
BEC = 18.47

Weight: <None>
Min Conc: <None>

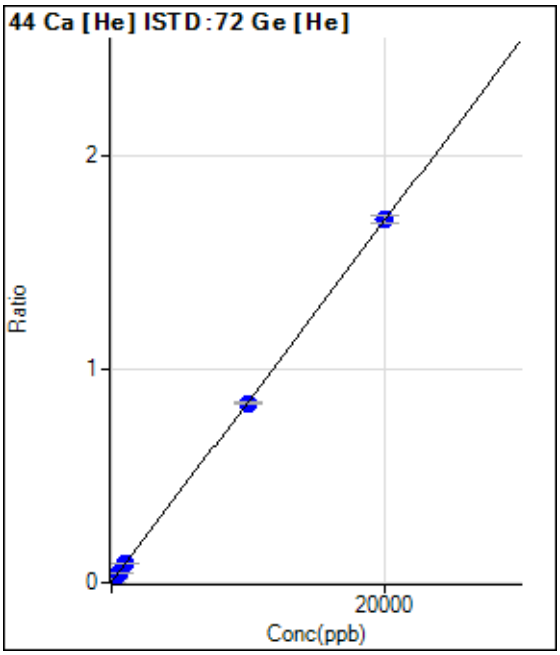
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19604.21	0.0128	P	1.8
2	☐	2.000	2.082	104004.98	0.0673	P	1.9
3	☐	5.000	5.124	228941.06	0.1469	P	3.8
4	☐	10.000	10.557	445603.89	0.2892	P	1.2
5	☐	100.000	98.893	3942521.92	2.6024	A	4.1
6	☐	200.000	200.522	7879084.68	5.2638	A	3.3

y = 0.0262 * x + 0.0128
R = 1.0000
DL = 0.0256
BEC = 0.4874

Weight: <None>
Min Conc: <None>

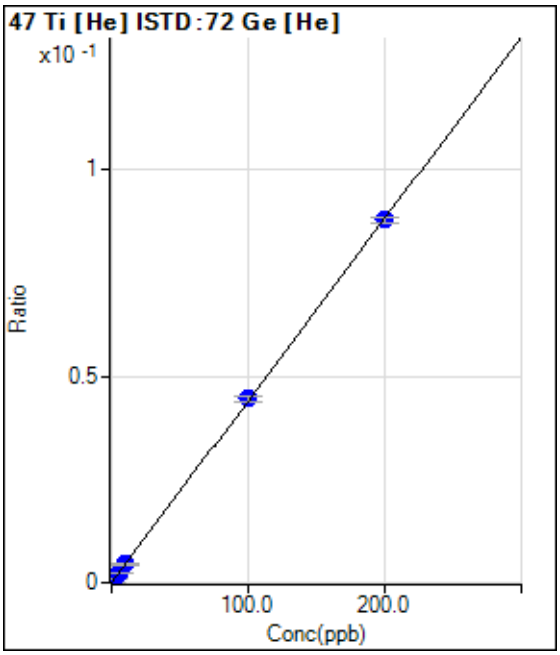


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	686.70	0.0016	P	12.8
2	☐	200.000	203.383	8219.26	0.0188	P	4.7
3	☐	500.000	506.862	19267.11	0.0446	P	3.0
4	☐	1000.000	1000.815	37023.29	0.0865	P	0.5
5	☐	10000.000	9901.205	358379.56	0.8415	P	1.5
6	☐	20000.000	20049.151	710281.94	1.7024	P	2.0

y = 8.4830E-005 * x + 0.0016
R = 1.0000
DL = 7.119
BEC = 18.61

Weight: <None>
Min Conc: <None>

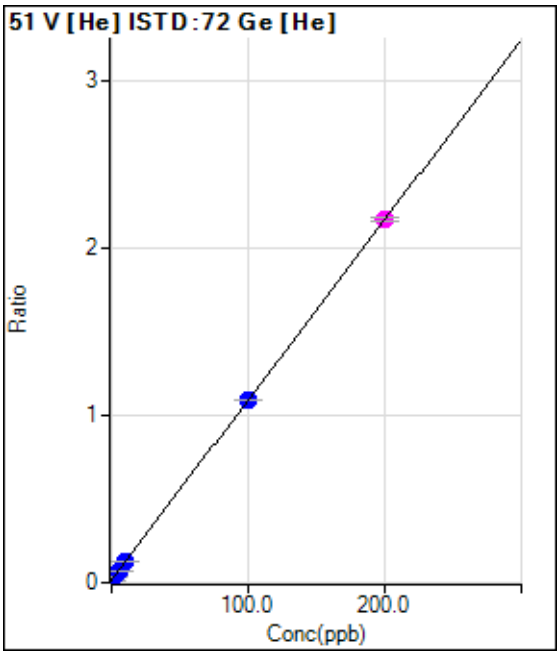
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	173.2
2	☐	2.000	1.734	340.01	0.0008	P	15.2
3	☐	5.000	5.350	1026.73	0.0024	P	15.6
4	☐	10.000	10.121	1916.84	0.0045	P	9.4
5	☐	100.000	101.030	18970.13	0.0445	P	2.6
6	☐	200.000	199.473	36692.82	0.0879	P	1.7

y = 4.4074E-004 * x + 1.5396E-005
R = 1.0000
DL = 0.1815
BEC = 0.03493

Weight: <None>
Min Conc: <None>

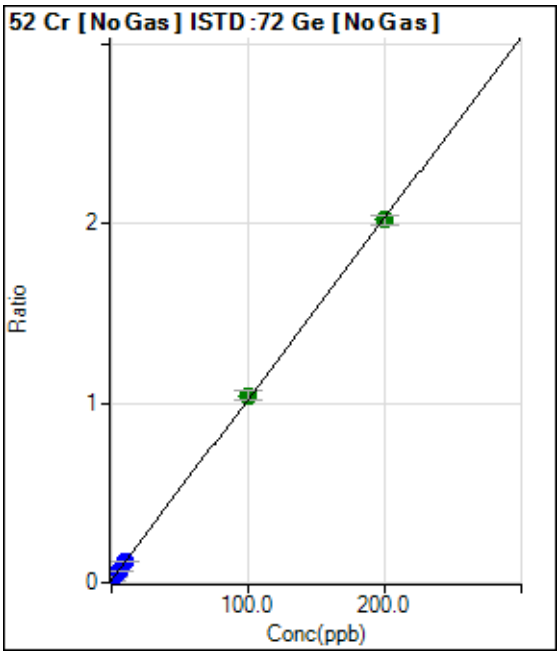


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6459.33	0.0149	P	2.2
2	☐	2.000	2.029	16018.29	0.0367	P	0.8
3	☐	5.000	4.975	29574.13	0.0684	P	1.8
4	☐	10.000	10.245	53583.20	0.1252	P	0.7
5	☐	100.000	99.928	464524.85	1.0907	P	0.3
6	☐	200.000	200.024	904818.16	2.1684	M	0.9

y = 0.0108 * x + 0.0149
R = 1.0000
DL = 0.09038
BEC = 1.38

Weight: <None>
Min Conc: <None>

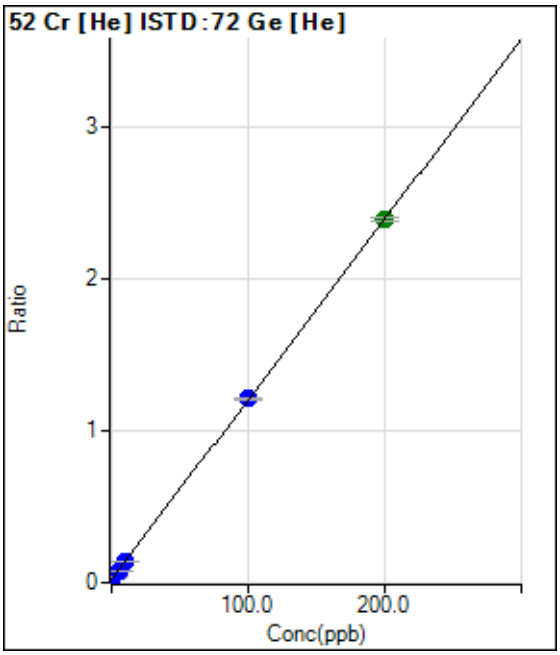
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22582.21	0.0147	P	1.6
2	☐	2.000	2.095	55392.11	0.0358	P	1.1
3	☐	5.000	4.979	101156.50	0.0649	P	4.0
4	☐	10.000	10.322	183026.93	0.1188	P	2.8
5	☐	100.000	101.980	1580460.65	1.0434	A	4.9
6	☐	200.000	198.994	3027003.70	2.0220	A	2.5

y = 0.0101 * x + 0.0147
R = 0.9999
DL = 0.06871
BEC = 1.457

Weight: <None>
Min Conc: <None>

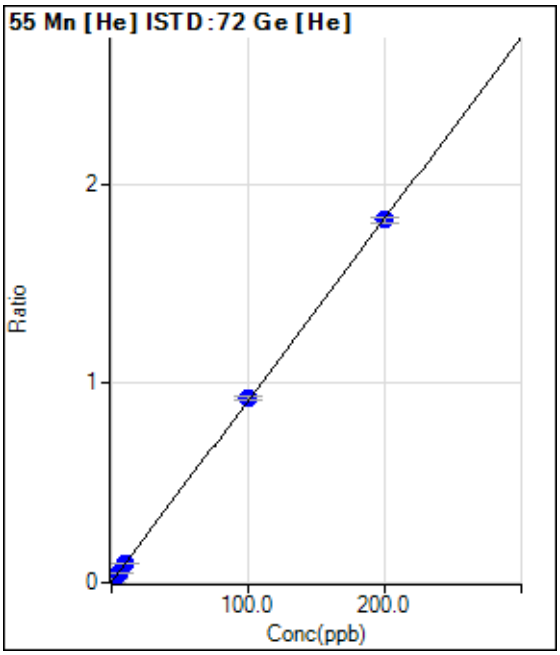


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8469.46	0.0195	P	2.7
2	☐	2.000	2.119	19450.77	0.0446	P	2.5
3	☐	5.000	5.178	34935.04	0.0808	P	2.6
4	☐	10.000	10.385	60982.85	0.1425	P	1.9
5	☐	100.000	100.603	515672.44	1.2109	P	1.2
6	☐	200.000	199.674	994779.18	2.3841	A	1.0

y = 0.0118 * x + 0.0195
R = 1.0000
DL = 0.1329
BEC = 1.645

Weight: <None>
Min Conc: <None>

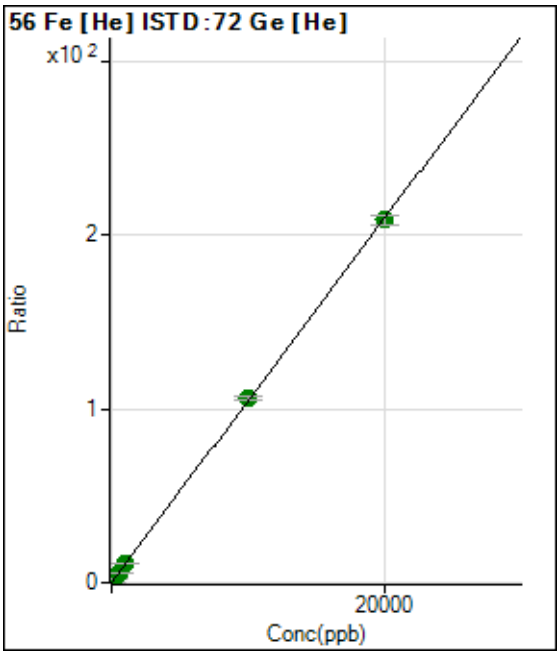
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1313.42	0.0030	P	12.6
2	☐	2.000	2.159	9910.44	0.0227	P	3.9
3	☐	5.000	5.122	21500.55	0.0497	P	0.9
4	☐	10.000	10.463	42139.29	0.0984	P	2.4
5	☐	100.000	100.973	393474.36	0.9239	P	1.8
6	☐	200.000	199.486	760358.43	1.8224	P	1.2

y = 0.0091 * x + 0.0030
R = 1.0000
DL = 0.1248
BEC = 0.3313

Weight: <None>
Min Conc: <None>

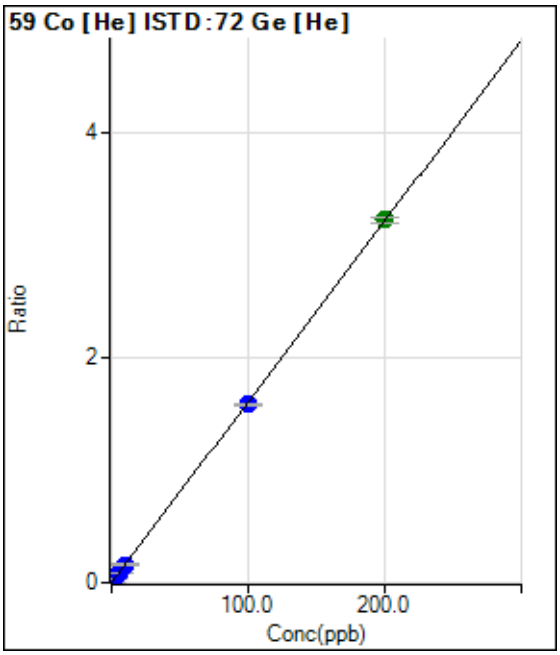


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20525.75	0.0472	P	2.7
2	☐	200.000	212.080	989147.59	2.2666	A	3.0
3	☐	500.000	527.020	2404220.75	5.5625	A	3.1
4	☐	1000.000	1053.531	4740043.99	11.0725	A	1.1
5	☐	10000.000	10156.139	45284037.66	106.3318	A	1.6
6	☐	20000.000	19918.458	86984112.04	208.4950	A	2.7

y = 0.0105 * x + 0.0472
R = 1.0000
DL = 0.3602
BEC = 4.512

Weight: <None>
Min Conc: <None>

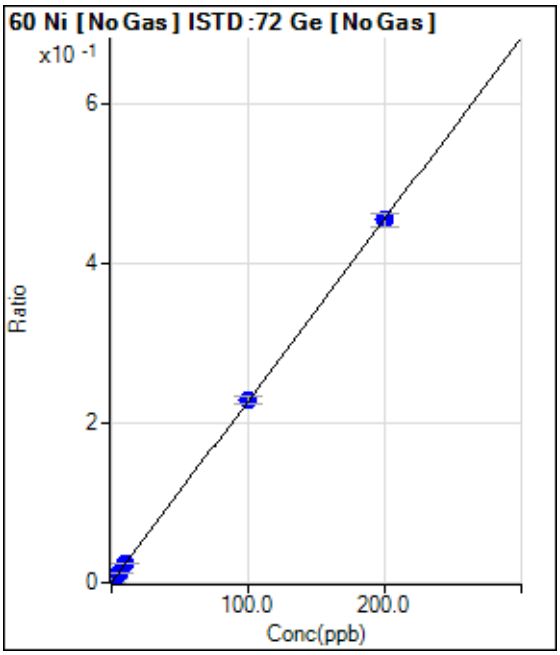
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0003	P	23.3
2	☐	2.000	2.077	14738.23	0.0338	P	4.4
3	☐	5.000	5.063	35359.69	0.0818	P	2.4
4	☐	10.000	10.057	69430.31	0.1622	P	1.2
5	☐	100.000	98.491	675067.15	1.5851	P	0.8
6	☐	200.000	200.749	1348048.42	3.2305	A	1.6

y = 0.0161 * x + 3.3710E-004
R = 1.0000
DL = 0.01466
BEC = 0.02095

Weight: <None>
Min Conc: <None>

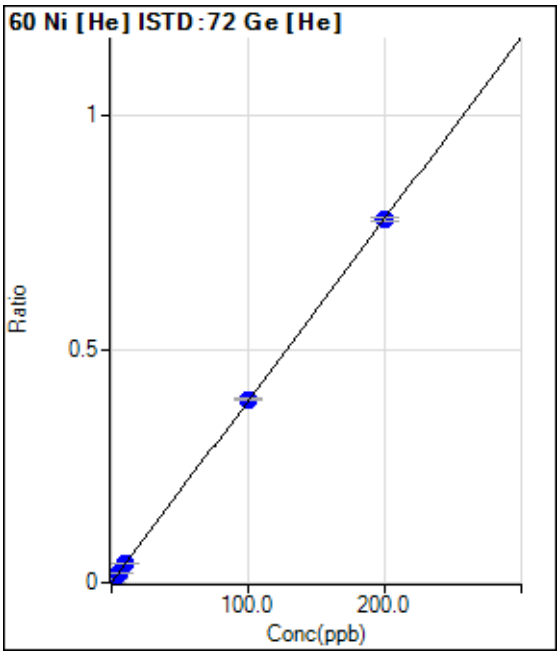


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	446.69	0.0003	P	9.3
2	☐	2.000	2.139	7982.47	0.0052	P	6.8
3	☐	5.000	5.160	18773.24	0.0121	P	6.6
4	☐	10.000	10.318	36676.51	0.0238	P	3.5
5	☐	100.000	100.688	348177.14	0.2298	P	3.8
6	☐	200.000	199.635	681574.91	0.4554	P	3.7

y = 0.0023 * x + 2.9081E-004
R = 1.0000
DL = 0.03558
BEC = 0.1276

Weight: <None>
Min Conc: <None>

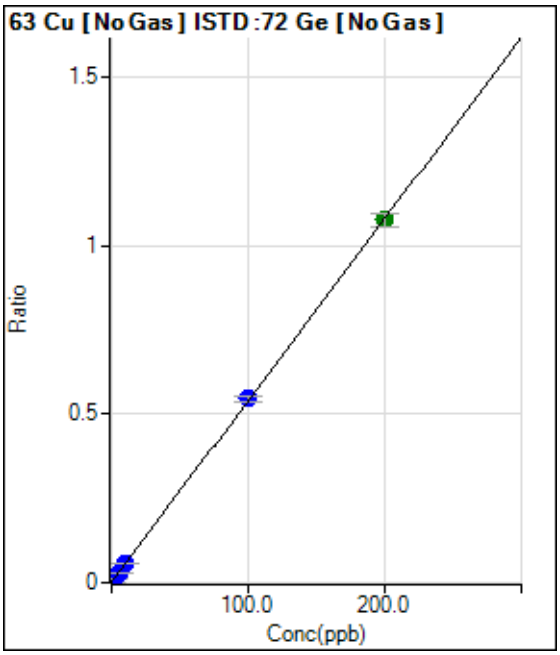
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226.68	0.0005	P	21.2
2	☐	2.000	2.174	3920.64	0.0090	P	6.9
3	☐	5.000	5.219	9009.80	0.0208	P	1.7
4	☐	10.000	10.460	17655.12	0.0412	P	4.0
5	☐	100.000	100.824	167414.96	0.3931	P	1.2
6	☐	200.000	199.558	324427.30	0.7776	P	1.2

y = 0.0039 * x + 5.2171E-004
R = 1.0000
DL = 0.08536
BEC = 0.134

Weight: <None>
Min Conc: <None>

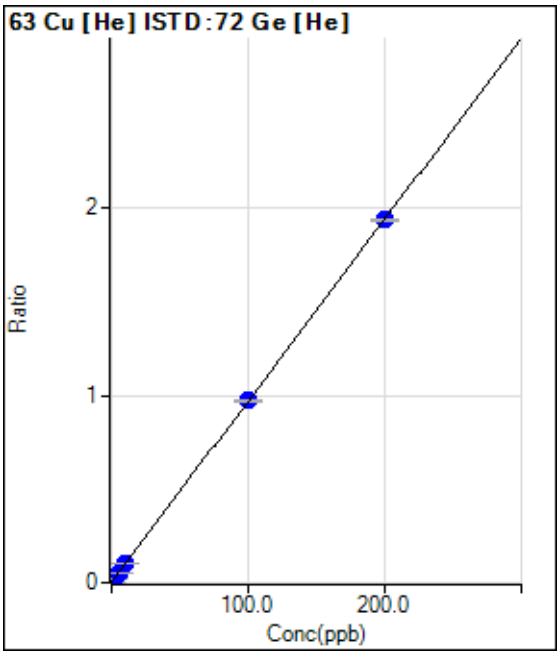


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2100.20	0.0014	P	5.9
2	☐	2.000	2.003	18789.93	0.0122	P	4.3
3	☐	5.000	4.994	44045.10	0.0283	P	3.3
4	☐	10.000	10.335	87849.92	0.0570	P	2.6
5	☐	100.000	100.885	825338.48	0.5447	P	3.1
6	☐	200.000	199.541	1610706.54	1.0760	A	3.6

y = 0.0054 * x + 0.0014
R = 1.0000
DL = 0.04482
BEC = 0.2539

Weight: <None>
Min Conc: <None>

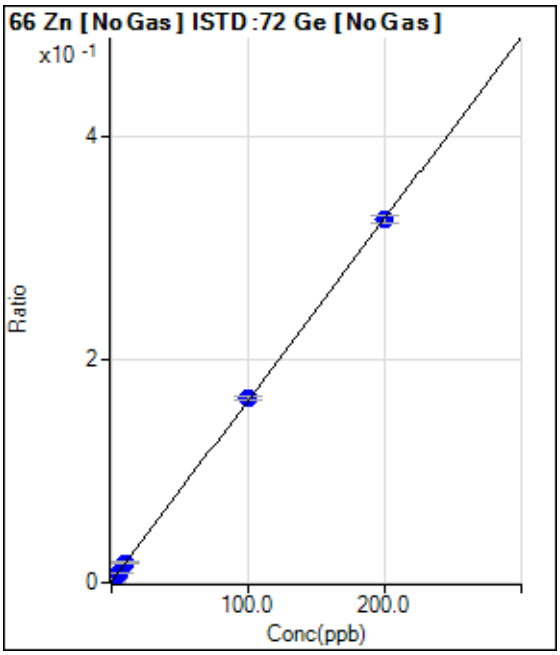
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	940.05	0.0022	P	13.8
2	☐	2.000	1.904	8996.44	0.0206	P	2.4
3	☐	5.000	5.036	22028.10	0.0510	P	2.2
4	☐	10.000	10.412	44122.06	0.1031	P	0.9
5	☐	100.000	100.263	414715.20	0.9738	P	1.5
6	☐	200.000	199.848	808982.31	1.9388	P	0.4

y = 0.0097 * x + 0.0022
R = 1.0000
DL = 0.0925
BEC = 0.223

Weight: <None>
Min Conc: <None>

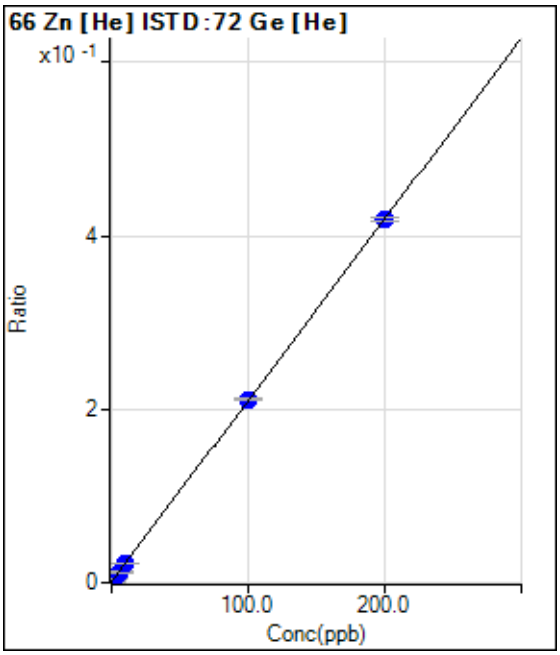


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1290.09	0.0008	P	10.4
2	☐	2.000	2.117	6628.41	0.0043	P	0.9
3	☐	5.000	4.857	13640.44	0.0087	P	2.4
4	☐	10.000	10.490	27601.67	0.0179	P	3.7
5	☐	100.000	101.197	250978.89	0.1656	P	2.5
6	☐	200.000	199.379	487264.46	0.3255	P	2.3

y = 0.0016 * x + 8.4107E-004
R = 1.0000
DL = 0.1618
BEC = 0.5166

Weight: <None>
Min Conc: <None>

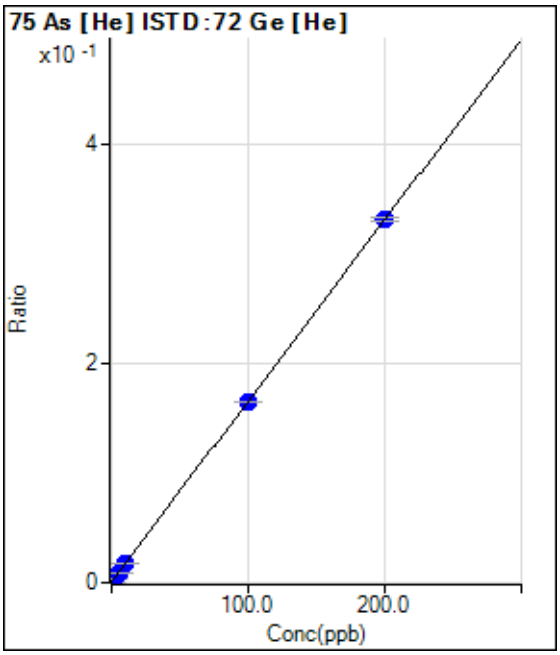
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	453.35	0.0010	P	27.1
2	☐	2.000	2.150	2416.93	0.0055	P	10.3
3	☐	5.000	5.152	5104.38	0.0118	P	6.7
4	☐	10.000	9.950	9346.71	0.0218	P	4.2
5	☐	100.000	100.607	89998.00	0.2113	P	1.3
6	☐	200.000	199.694	174592.11	0.4184	P	0.9

y = 0.0021 * x + 0.0010
R = 1.0000
DL = 0.4055
BEC = 0.4983

Weight: <None>
Min Conc: <None>

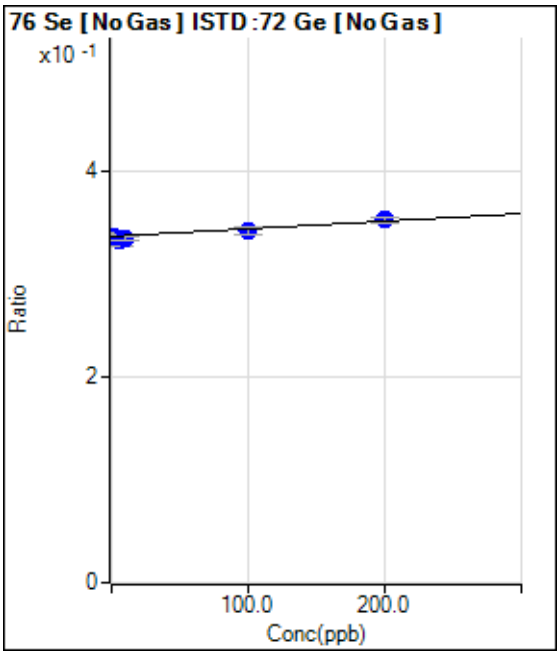


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.67	0.0007	P	13.7
2	☐	2.000	1.968	1714.56	0.0039	P	2.1
3	☐	5.000	5.090	3926.15	0.0091	P	1.6
4	☐	10.000	10.128	7445.44	0.0174	P	2.8
5	☐	100.000	99.546	70237.55	0.1649	P	0.5
6	☐	200.000	200.219	138116.02	0.3310	P	1.1

y = 0.0016 * x + 6.8238E-004
R = 1.0000
DL = 0.1695
BEC = 0.4136

Weight: <None>
Min Conc: <None>

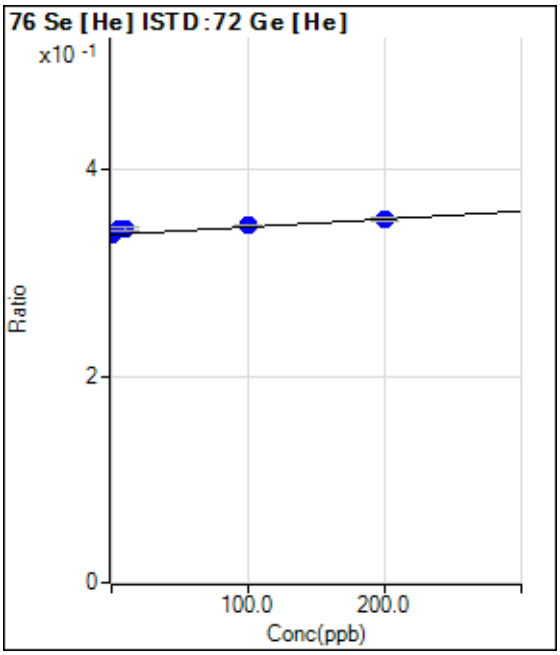
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	516307.35	0.3362	P	2.0
2	☐	2.000	6.297	520344.40	0.3366	P	1.3
3	☐	5.000	-53.346	517734.97	0.3322	P	3.1
4	☐	10.000	-29.376	514572.36	0.3340	P	1.4
5	☐	100.000	75.265	517838.46	0.3417	P	2.5
6	☐	200.000	215.752	527188.73	0.3521	P	1.5

y = 7.3842E-005 * x + 0.3362
R = 0.9662
DL = 268.4
BEC = 4553

Weight: <None>
Min Conc: <None>

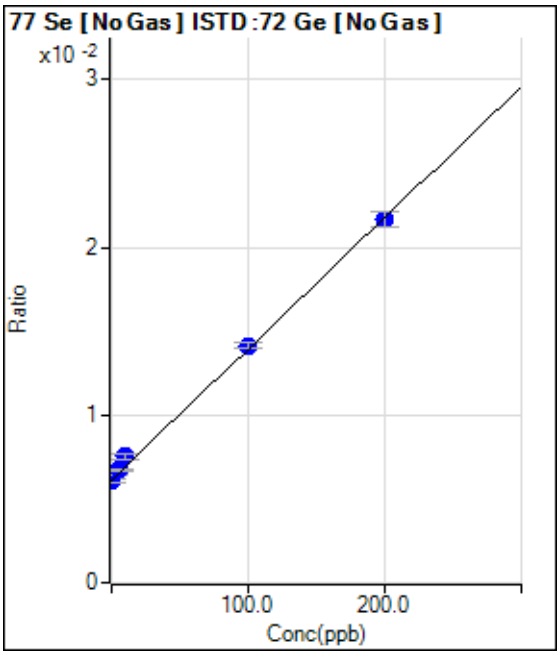


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146429.49	0.3369	P	0.7
2	☐	2.000	17.947	147618.44	0.3382	P	0.3
3	☐	5.000	77.062	148159.01	0.3427	P	1.2
4	☐	10.000	66.770	146393.13	0.3420	P	1.0
5	☐	100.000	111.944	147094.67	0.3454	P	0.4
6	☐	200.000	189.228	146568.57	0.3513	P	1.1

y = 7.6194E-005 * x + 0.3369
R = 0.9197
DL = 89.18
BEC = 4421

Weight: <None>
Min Conc: <None>

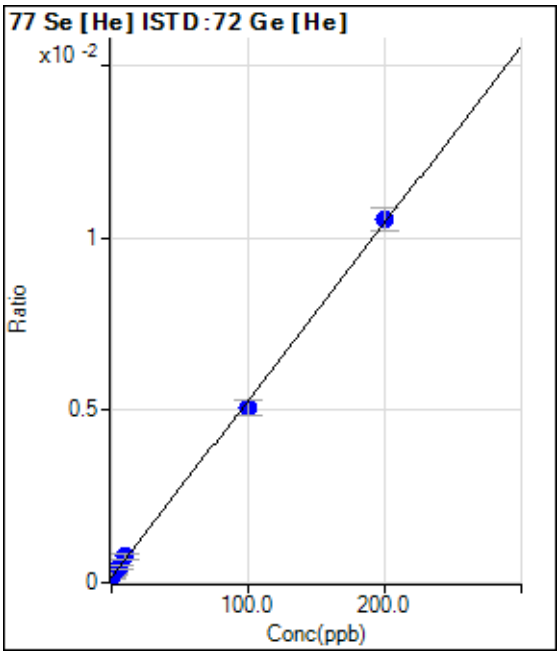
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9413.43	0.0061	P	3.8
2	☐	2.000	4.504	10023.89	0.0065	P	2.3
3	☐	5.000	7.663	10494.26	0.0067	P	1.7
4	☐	10.000	17.892	11598.50	0.0075	P	5.3
5	☐	100.000	102.662	21467.40	0.0142	P	2.6
6	☐	200.000	198.183	32389.23	0.0216	P	4.4

y = 7.8265E-005 * x + 0.0061
R = 0.9994
DL = 9.007
BEC = 78.34

Weight: <None>
Min Conc: <None>

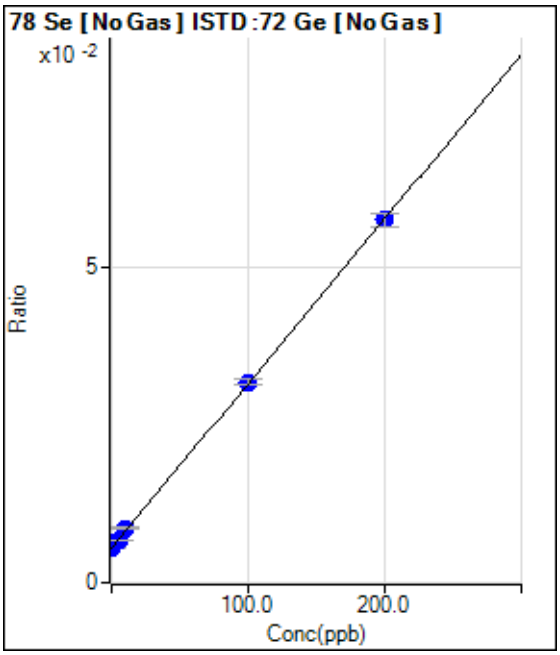


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	38.2
2	☐	2.000	2.356	120.00	0.0003	P	21.4
3	☐	5.000	6.176	203.34	0.0005	P	24.0
4	☐	10.000	11.714	323.34	0.0008	P	18.0
5	☐	100.000	96.024	2166.88	0.0051	P	8.3
6	☐	200.000	201.869	4390.80	0.0105	P	6.3

y = 5.1385E-005 * x + 1.5364E-004
R = 0.9996
DL = 3.431
BEC = 2.99

Weight: <None>
Min Conc: <None>

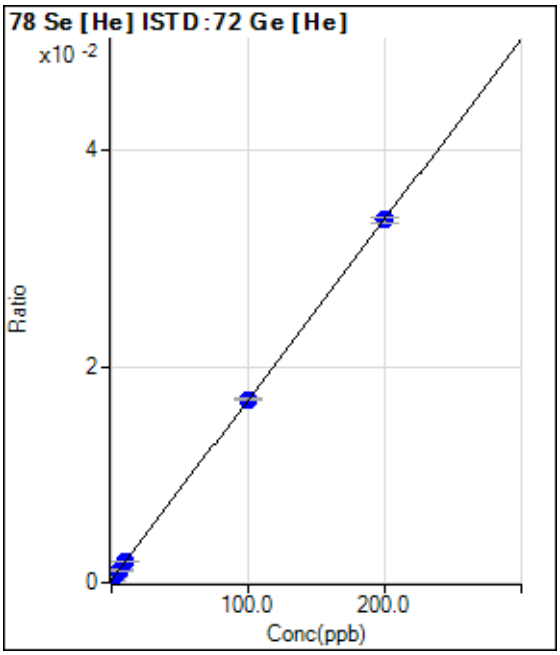
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8479.50	0.0055	P	2.7
2	☐	2.000	3.791	10067.27	0.0065	P	1.8
3	☐	5.000	4.660	10510.93	0.0067	P	4.0
4	☐	10.000	11.976	13326.82	0.0087	P	4.5
5	☐	100.000	100.895	48330.48	0.0319	P	3.1
6	☐	200.000	199.444	86306.71	0.0577	P	3.7

y = 2.6142E-004 * x + 0.0055
R = 0.9999
DL = 1.738
BEC = 21.12

Weight: <None>
Min Conc: <None>

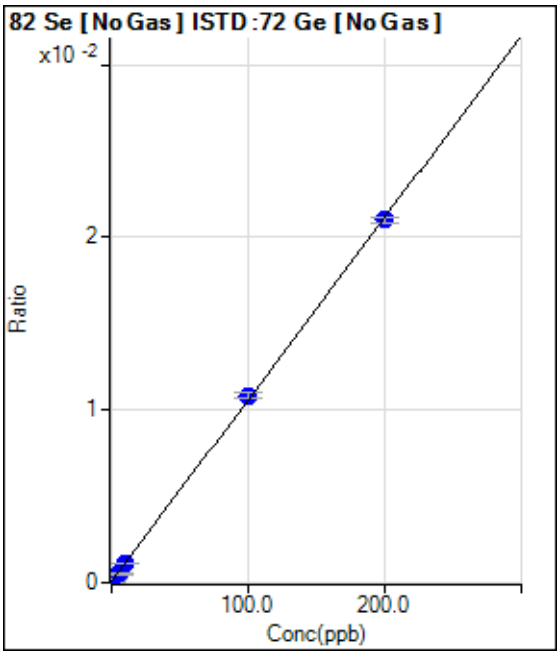


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98.67	0.0002	P	8.7
2	☐	2.000	2.218	260.67	0.0006	P	10.5
3	☐	5.000	5.483	494.01	0.0011	P	2.6
4	☐	10.000	10.238	829.36	0.0019	P	0.2
5	☐	100.000	100.426	7240.64	0.0170	P	0.8
6	☐	200.000	199.761	14016.63	0.0336	P	1.3

y = 1.6704E-004 * x + 2.2701E-004
R = 1.0000
DL = 0.3529
BEC = 1.359

Weight: <None>
Min Conc: <None>

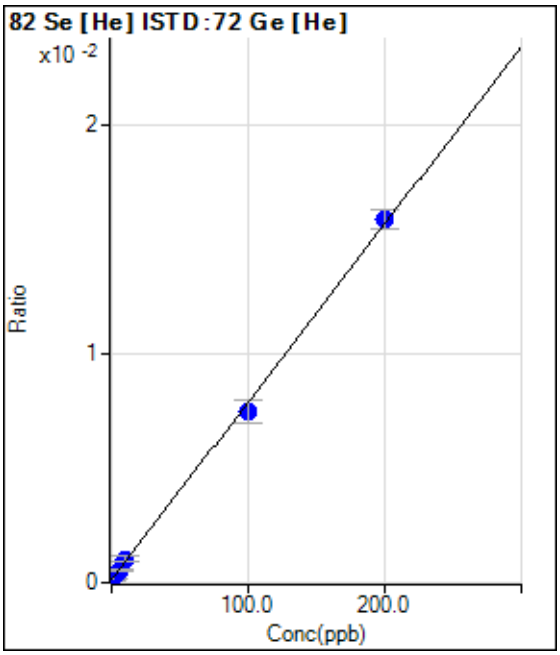
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.23	0.0001	P	61.2
2	☐	2.000	2.213	451.37	0.0003	P	18.4
3	☐	5.000	4.212	784.80	0.0005	P	14.7
4	☐	10.000	10.124	1734.92	0.0011	P	5.8
5	☐	100.000	102.289	16415.72	0.0108	P	2.7
6	☐	200.000	198.867	31448.76	0.0210	P	1.4

y = 1.0532E-004 * x + 5.8853E-005
R = 0.9999
DL = 1.027
BEC = 0.5588

Weight: <None>
Min Conc: <None>

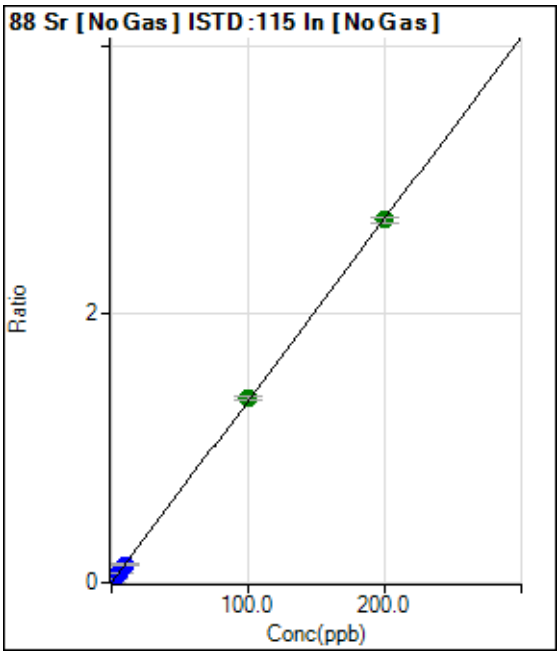


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0001	P	53.1
2	☐	2.000	1.576	110.00	0.0003	P	60.2
3	☐	5.000	5.169	230.01	0.0005	P	19.8
4	☐	10.000	11.364	433.35	0.0010	P	24.5
5	☐	100.000	94.835	3197.13	0.0075	P	13.6
6	☐	200.000	202.514	6625.10	0.0159	P	5.4

y = 7.7785E-005 * x + 1.3001E-004
R = 0.9995
DL = 2.663
BEC = 1.671

Weight: <None>
Min Conc: <None>

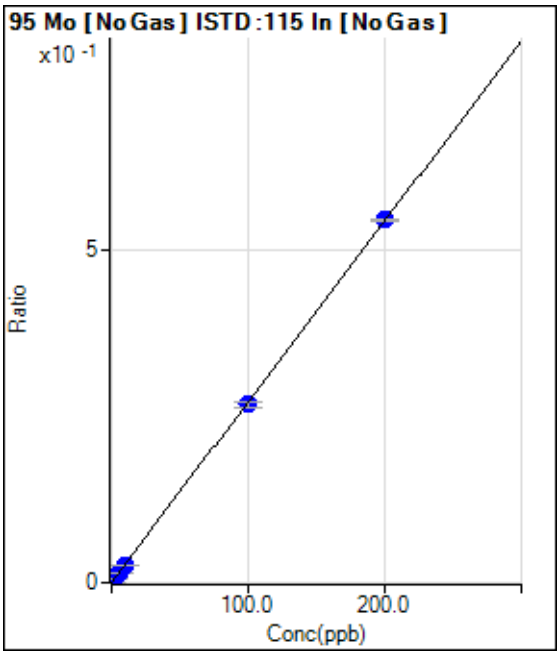
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1166.74	0.0007	P	7.6
2	☐	2.000	1.995	48943.29	0.0277	P	5.2
3	☐	5.000	4.952	120043.01	0.0678	P	1.6
4	☐	10.000	9.984	239772.28	0.1360	P	4.0
5	☐	100.000	101.078	2345392.57	1.3709	A	2.2
6	☐	200.000	199.463	4521308.68	2.7047	A	1.9

y = 0.0136 * x + 6.6831E-004
R = 1.0000
DL = 0.01128
BEC = 0.0493

Weight: <None>
Min Conc: <None>

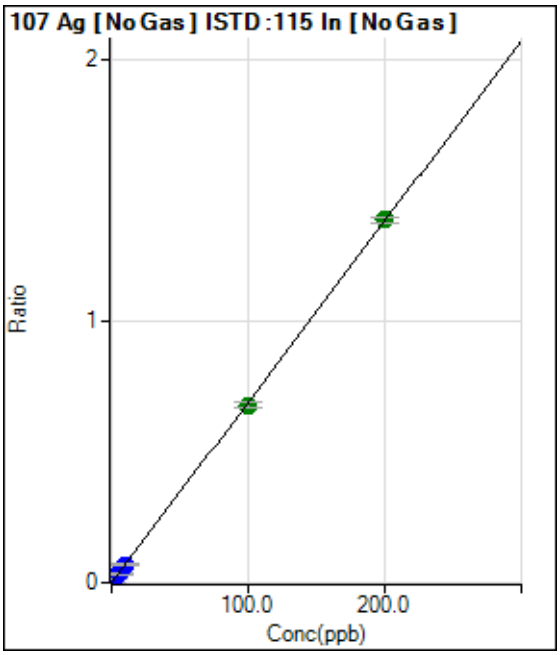


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	701.44	0.0004	P	106.2
2	☐	2.000	2.123	10875.10	0.0062	P	14.0
3	☐	5.000	4.712	23330.82	0.0132	P	2.3
4	☐	10.000	9.707	47120.38	0.0267	P	3.4
5	☐	100.000	98.402	457038.22	0.2672	P	3.1
6	☐	200.000	200.820	911074.86	0.5450	P	0.7

y = 0.0027 * x + 4.0051E-004
R = 1.0000
DL = 0.4704
BEC = 0.1477

Weight: <None>
Min Conc: <None>

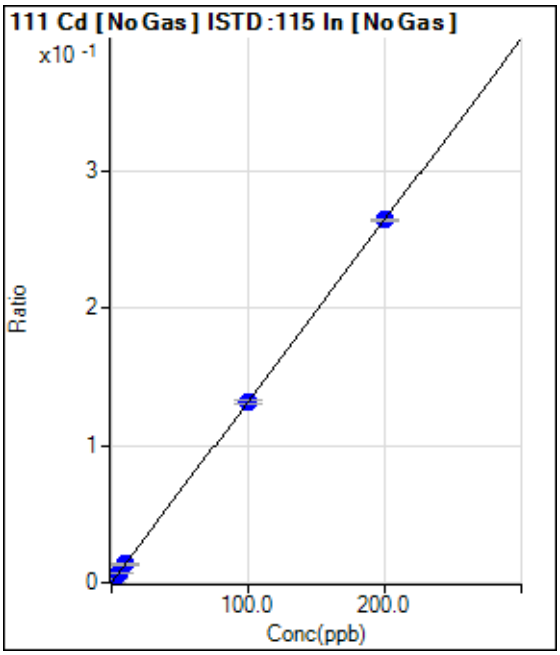
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.01	0.0001	P	30.0
2	☐	2.000	2.019	24796.98	0.0140	P	4.5
3	☐	5.000	4.792	58737.54	0.0332	P	1.8
4	☐	10.000	10.013	122047.20	0.0692	P	2.4
5	☐	100.000	98.248	1159981.29	0.6783	A	3.3
6	☐	200.000	200.881	2318497.31	1.3868	A	1.3

y = 0.0069 * x + 9.7146E-005
R = 0.9999
DL = 0.01266
BEC = 0.01407

Weight: <None>
Min Conc: <None>

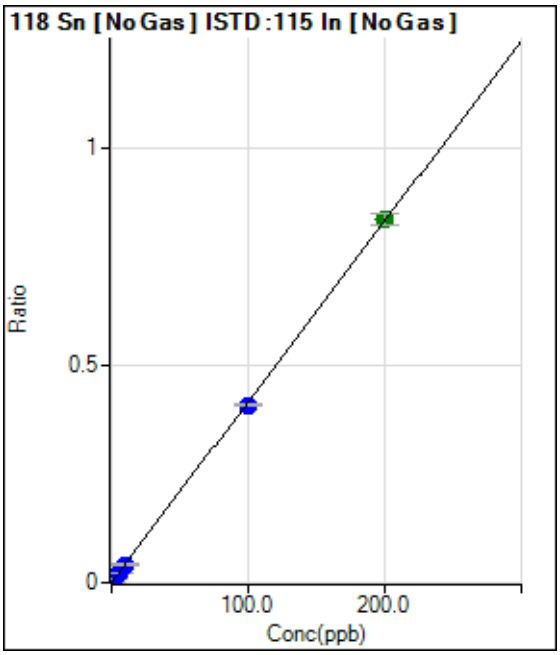


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	173.2
2	☐	2.000	2.007	4686.89	0.0027	P	10.5
3	☐	5.000	4.957	11613.61	0.0066	P	3.7
4	☐	10.000	10.135	23642.89	0.0134	P	2.4
5	☐	100.000	99.836	225839.66	0.1321	P	2.5
6	☐	200.000	200.076	442405.05	0.2646	P	0.8

y = 0.0013 * x + 3.7991E-006
R = 1.0000
DL = 0.01492
BEC = 0.002872

Weight: <None>
Min Conc: <None>

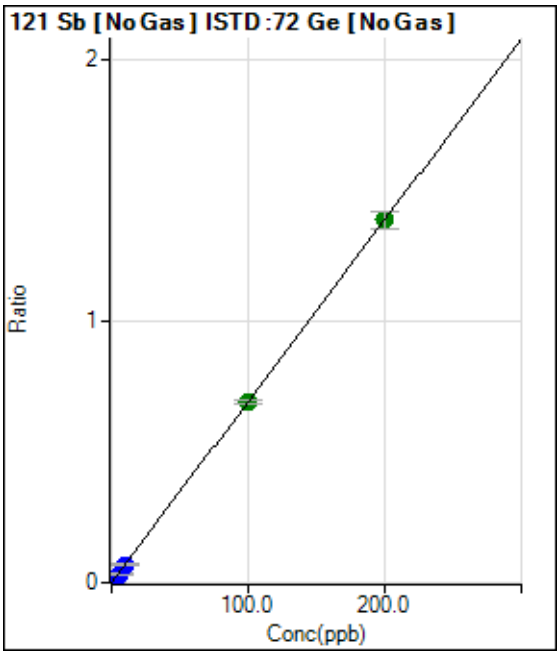
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1176.75	0.0007	P	6.9
2	☐	2.000	1.944	15422.64	0.0087	P	5.0
3	☐	5.000	4.835	36695.15	0.0207	P	2.2
4	☐	10.000	9.889	73482.26	0.0417	P	3.8
5	☐	100.000	98.365	698866.68	0.4086	P	1.7
6	☐	200.000	200.828	1393406.12	0.8335	A	3.0

y = 0.0041 * x + 6.7399E-004
R = 1.0000
DL = 0.03378
BEC = 0.1625

Weight: <None>
Min Conc: <None>

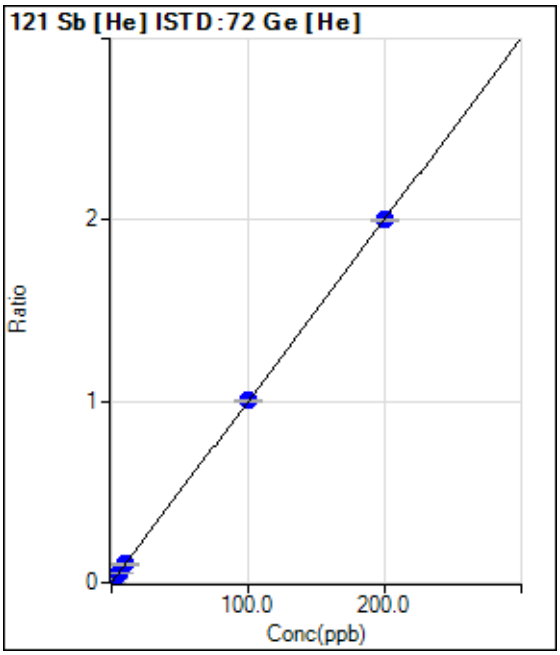


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	120.00	0.0001	P	70.9
2	☐	2.000	1.965	21144.04	0.0137	P	4.3
3	☐	5.000	4.712	50956.27	0.0327	P	2.7
4	☐	10.000	9.955	106282.67	0.0690	P	2.7
5	☐	100.000	99.698	1045988.53	0.6903	A	2.5
6	☐	200.000	200.161	2073811.53	1.3857	A	4.8

y = 0.0069 * x + 7.8381E-005
R = 1.0000
DL = 0.02408
BEC = 0.01132

Weight: <None>
Min Conc: <None>

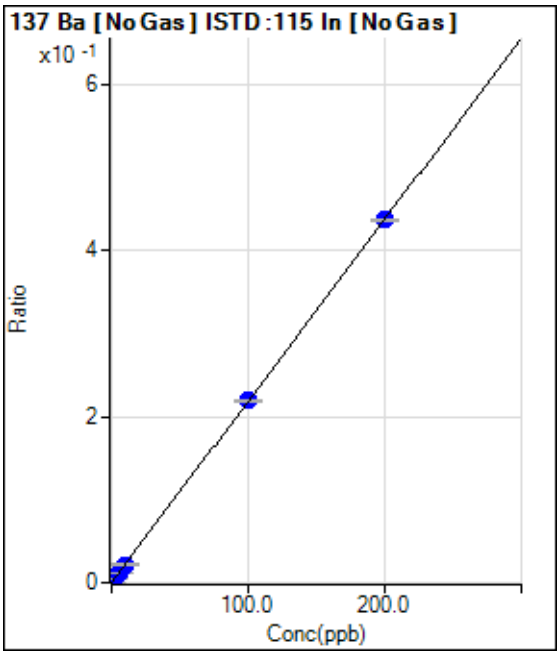
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0001	P	60.1
2	☐	2.000	2.006	8829.81	0.0202	P	1.9
3	☐	5.000	4.903	21277.68	0.0492	P	3.0
4	☐	10.000	10.050	43141.32	0.1008	P	0.6
5	☐	100.000	100.328	427816.84	1.0046	P	1.0
6	☐	200.000	199.836	834857.46	2.0008	P	0.6

y = 0.0100 * x + 1.4615E-004
R = 1.0000
DL = 0.02632
BEC = 0.0146

Weight: <None>
Min Conc: <None>

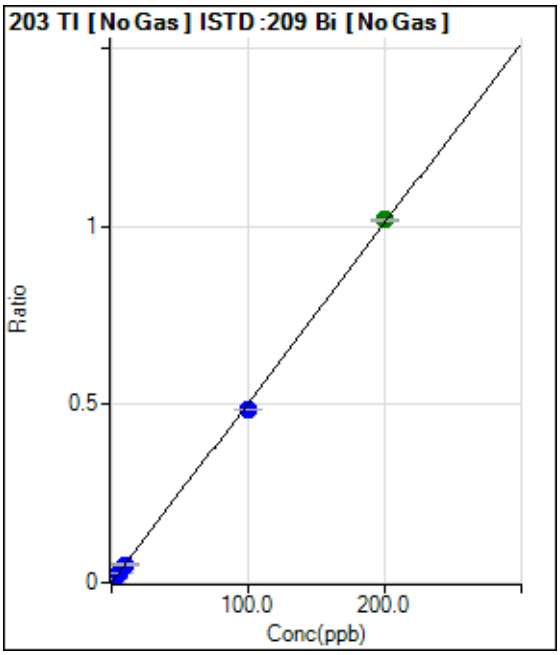


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260.01	0.0001	P	13.7
2	☐	2.000	1.991	7939.23	0.0045	P	4.7
3	☐	5.000	4.968	19474.83	0.0110	P	2.0
4	☐	10.000	9.962	38614.54	0.0219	P	4.7
5	☐	100.000	100.172	374481.59	0.2189	P	1.0
6	☐	200.000	199.917	730184.75	0.4368	P	0.3

y = 0.0022 * x + 1.4901E-004
R = 1.0000
DL = 0.02814
BEC = 0.06823

Weight: <None>
Min Conc: <None>

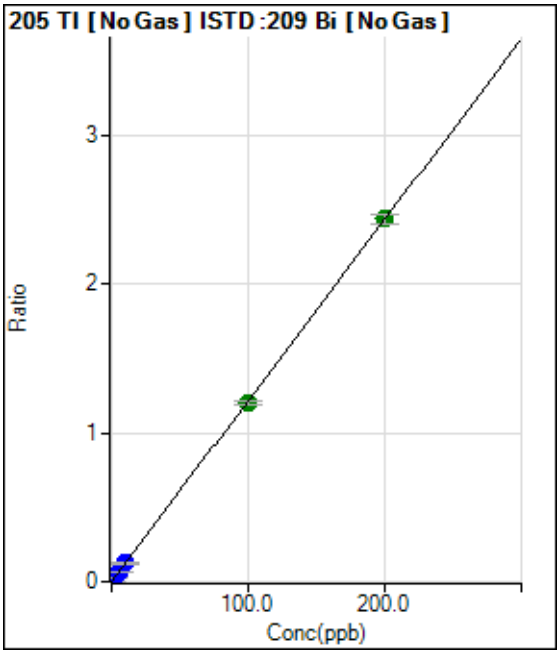
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	240.01	0.0001	P	8.5
2	☐	2.000	2.195	18727.73	0.0112	P	2.4
3	☐	5.000	5.312	45198.55	0.0270	P	3.3
4	☐	10.000	10.051	84924.83	0.0509	P	3.1
5	☐	100.000	96.203	788327.02	0.4858	P	0.6
6	☐	200.000	201.886	1615706.17	1.0194	A	0.6

y = 0.0050 * x + 1.4532E-004
R = 0.9997
DL = 0.007303
BEC = 0.02879

Weight: <None>
Min Conc: <None>

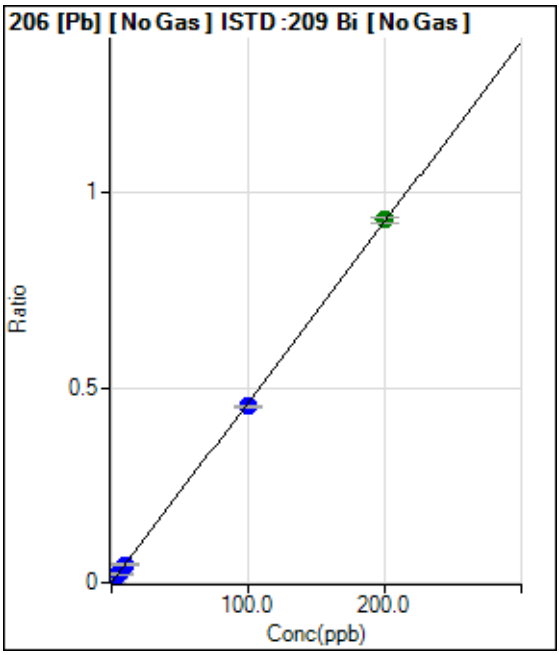


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.03	0.0004	P	3.2
2	☐	2.000	2.126	43767.50	0.0262	P	1.1
3	☐	5.000	5.295	108605.20	0.0648	P	2.2
4	☐	10.000	10.108	205779.47	0.1233	P	1.8
5	☐	100.000	98.866	1951050.02	1.2024	A	1.8
6	☐	200.000	200.553	3864674.22	2.4386	A	2.4

y = 0.0122 * x + 3.9356E-004
R = 1.0000
DL = 0.003133
BEC = 0.03237

Weight: <None>
Min Conc: <None>

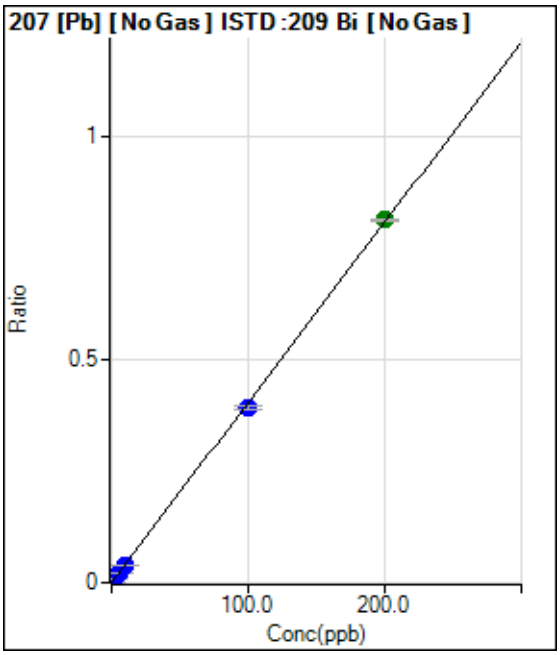
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.01	0.0001	P	29.4
2	☐	2.000	1.968	15393.14	0.0092	P	1.8
3	☐	5.000	4.811	37493.37	0.0224	P	5.9
4	☐	10.000	10.042	77718.79	0.0466	P	1.9
5	☐	100.000	97.671	732984.00	0.4517	P	0.8
6	☐	200.000	201.167	1474280.34	0.9302	A	1.6

y = 0.0046 * x + 1.2705E-004
R = 0.9999
DL = 0.02425
BEC = 0.02748

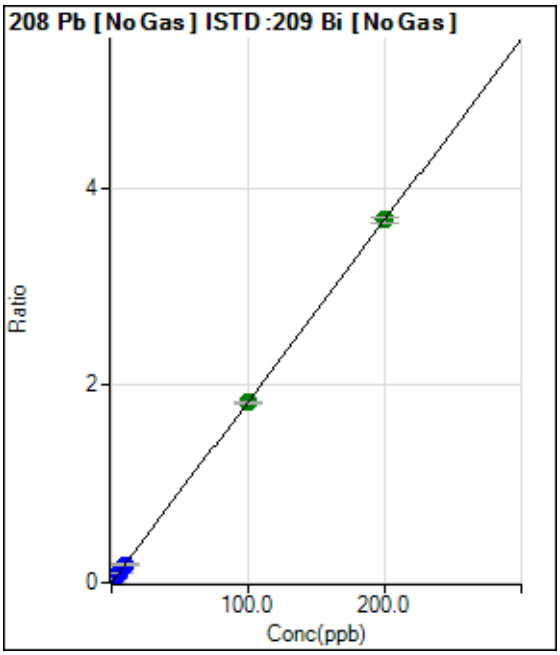
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.00	0.0001	P	24.9
2	☐	2.000	1.976	13490.85	0.0081	P	4.4
3	☐	5.000	4.855	33034.31	0.0197	P	1.7
4	☐	10.000	9.932	67036.78	0.0402	P	0.9
5	☐	100.000	97.247	636246.28	0.3921	P	1.7
6	☐	200.000	201.384	1286754.62	0.8118	A	0.8

y = 0.0040 * x + 1.2709E-004
R = 0.9999
DL = 0.02356
BEC = 0.03153

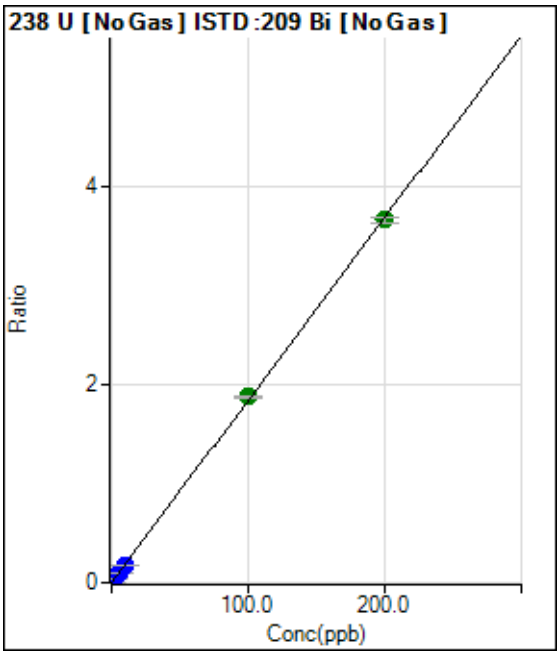
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	893.36	0.0005	P	8.5
2	☐	2.000	1.972	61329.97	0.0368	P	2.1
3	☐	5.000	4.881	151211.31	0.0902	P	3.4
4	☐	10.000	10.039	308697.02	0.1849	P	0.3
5	☐	100.000	99.569	2968622.34	1.8295	A	1.0
6	☐	200.000	200.217	5829601.68	3.6782	A	1.5

y = 0.0184 * x + 5.4080E-004
R = 1.0000
DL = 0.007471
BEC = 0.02944

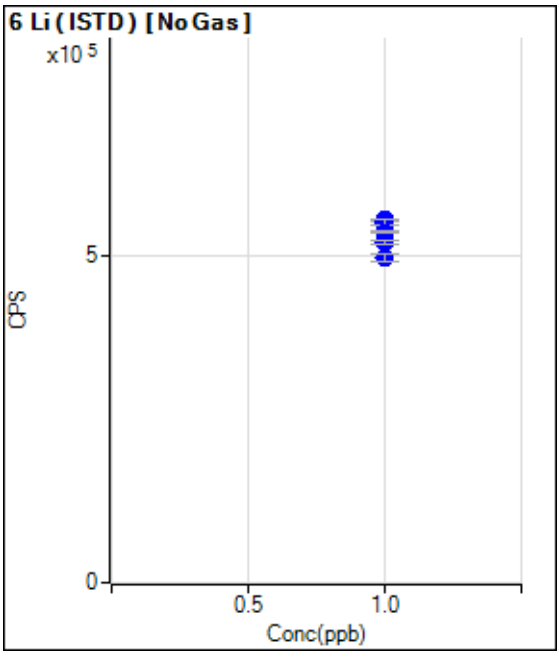
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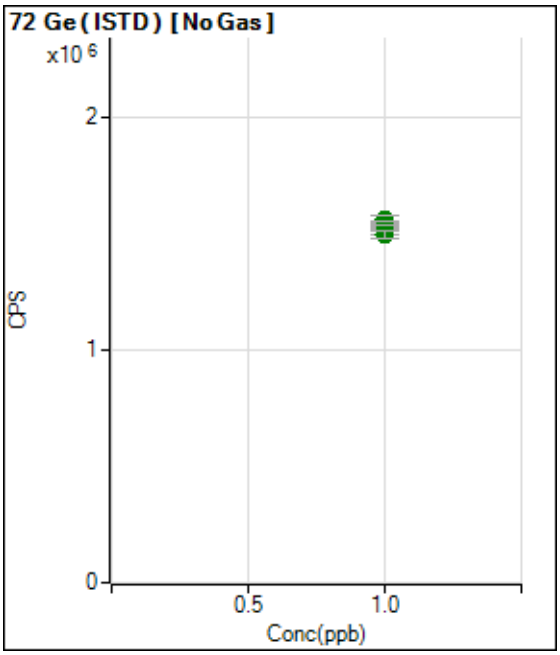
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	43.2
2	☐	2.000	1.990	61280.33	0.0367	P	3.1
3	☐	5.000	4.845	149940.19	0.0894	P	1.3
4	☐	10.000	9.881	304281.68	0.1823	P	1.4
5	☐	100.000	102.130	3056883.50	1.8839	A	1.3
6	☐	200.000	198.945	5815876.37	3.6697	A	1.9

y = 0.0184 * x + 4.0354E-005
R = 0.9999
DL = 0.002837
BEC = 0.002188

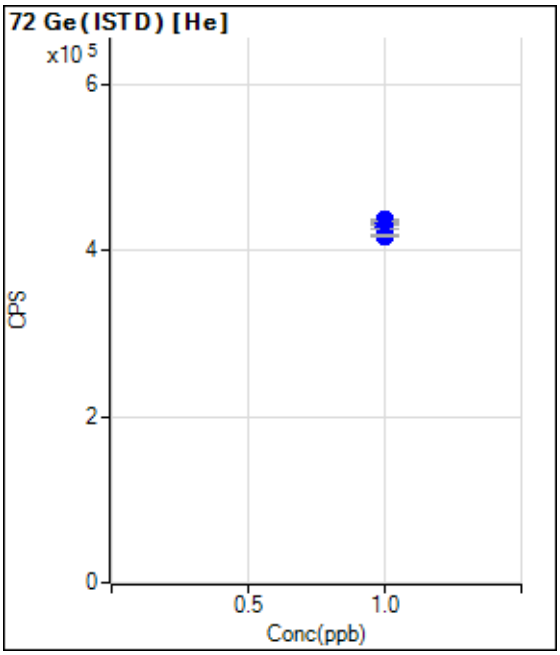
Weight: <None>
Min Conc: <None>



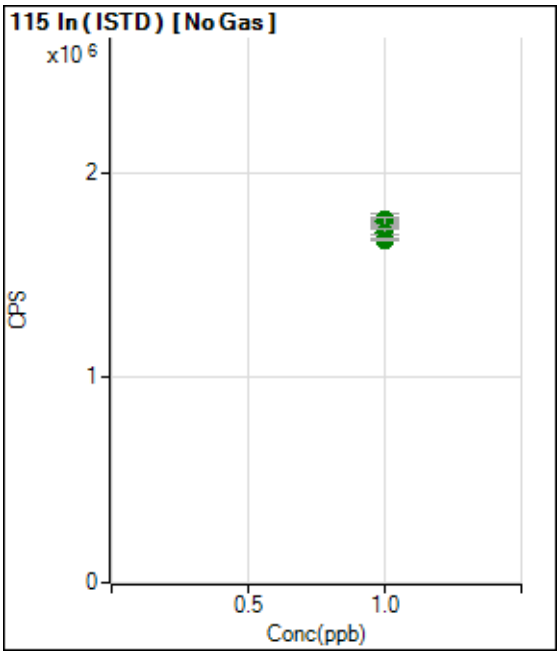
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		554546.19		P	0.9
2	☐	1.000		552228.01		P	1.6
3	☐	1.000		551060.85		P	1.5
4	☐	1.000		536316.57		P	1.0
5	☐	1.000		520074.52		P	0.8
6	☐	1.000		497056.77		P	2.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1536272.06		A	2.2
2	☐	1.000		1545878.21		A	1.1
3	☐	1.000		1558962.16		A	2.1
4	☐	1.000		1540927.42		A	2.0
5	☐	1.000		1515998.15		A	2.6
6	☐	1.000		1497584.56		A	2.3

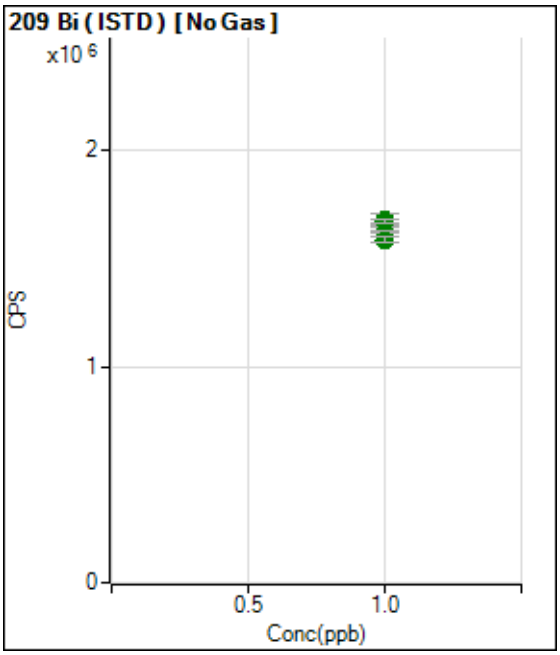


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		434692.04		P	0.8
2	☐	1.000		436436.98		P	0.7
3	☐	1.000		432297.31		P	1.0
4	☐	1.000		428133.22		P	1.4
5	☐	1.000		425877.78		P	0.1
6	☐	1.000		417263.51		P	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1744979.02		A	1.4
2	☐	1.000		1768019.16		A	4.2
3	☐	1.000		1770545.20		A	0.6
4	☐	1.000		1763688.52		A	1.8
5	☐	1.000		1710734.23		A	1.8
6	☐	1.000		1671778.33		A	0.7

Calibration for 192_ICV.d



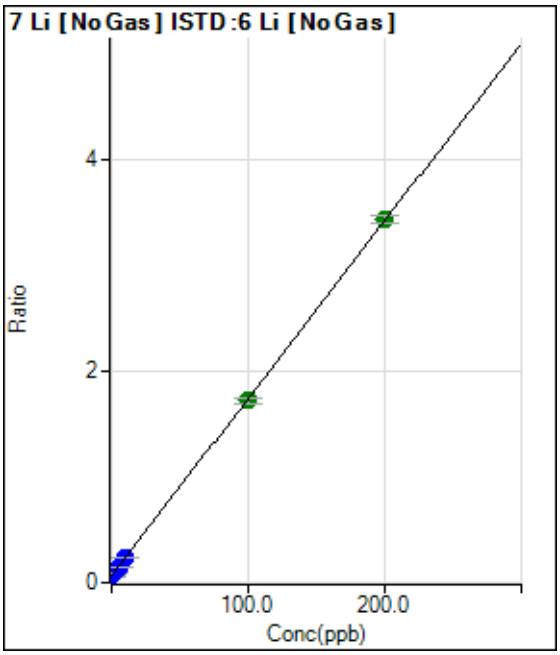
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1651723.26		A	0.4
2	☐	1.000		1668376.28		A	2.0
3	☐	1.000		1677594.61		A	3.5
4	☐	1.000		1669178.10		A	1.0
5	☐	1.000		1622676.48		A	0.3
6	☐	1.000		1585133.05		A	1.6

Calibration for 022_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080723A.b\
Analysis File: 080723A.batch.bin
DA Date-Time: 8/7/2023 10:09:57 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	015CALB.d	CAL BLK	8/7/2023 12:22:28 PM
2	016CALS.d	2/10/200	8/7/2023 12:24:25 PM
3	017CALS.d	5/25/500	8/7/2023 12:26:31 PM
4	018CALS.d	10/50/100	8/7/2023 12:28:27 PM
5	019CALS.d	100/500/10K	8/7/2023 12:30:22 PM
6	020CALS.d	200/1000/20K	8/7/2023 12:32:32 PM

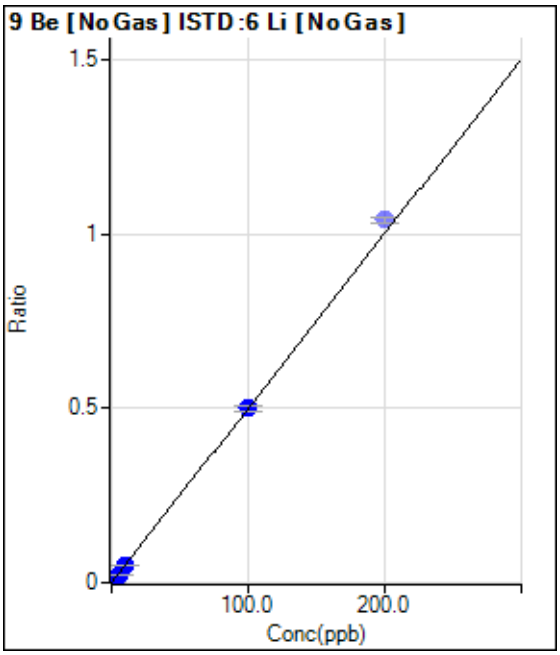
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46249.12	0.0653	P	7.2
2	☐	2.000	2.007	69009.76	0.0989	P	2.0
3	☐	5.000	4.700	102827.54	0.1439	P	2.4
4	☐	10.000	10.223	161238.76	0.2364	P	1.6
5	☐	100.000	98.600	1156579.83	1.7149	A	2.3
6	☐	200.000	200.696	2216629.86	3.4229	A	2.1

y = 0.0167 * x + 0.0653
R = 1.0000
DL = 0.8398
BEC = 3.904

Weight: <None>
Min Conc: <None>

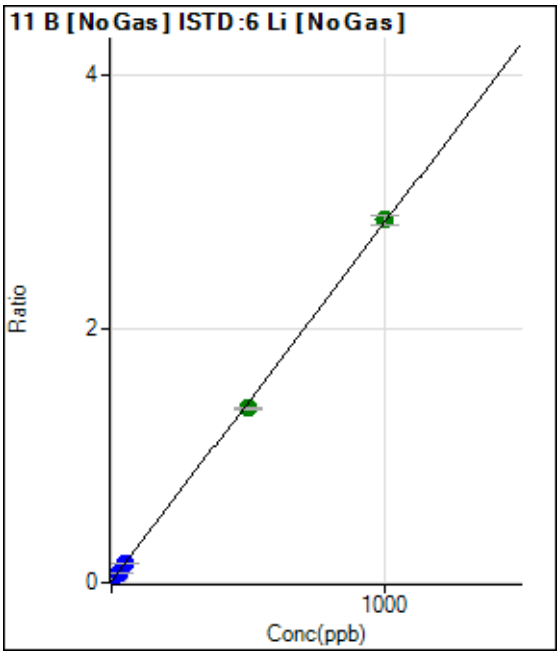


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.00	0.0001	P	35.6
2	☐	2.000	1.956	6878.39	0.0099	P	3.0
3	☐	5.000	4.706	16861.87	0.0236	P	1.8
4	☐	10.000	10.134	34617.48	0.0507	P	1.2
5	☐	100.000	100.002	337043.59	0.5000	P	3.7
6	☑	200.000		673415.15	1.0398	P	1.4

y = 0.0050 * x + 7.8293E-005
R = 1.0000
DL = 0.01673
BEC = 0.01566

Weight: <None>
Min Conc: <None>

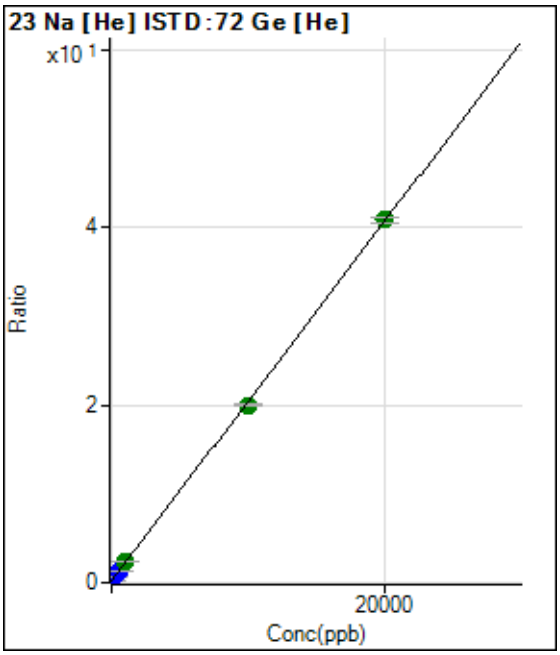
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7273.60	0.0103	P	4.2
2	☐	10.000	9.904	26658.63	0.0382	P	3.0
3	☐	25.000	23.434	54547.11	0.0764	P	3.0
4	☐	50.000	50.431	104042.06	0.1525	P	2.0
5	☐	500.000	483.063	925884.86	1.3729	A	1.7
6	☐	1000.000	1008.487	1848731.64	2.8549	A	2.8

y = 0.0028 * x + 0.0103
R = 0.9998
DL = 0.4589
BEC = 3.639

Weight: <None>
Min Conc: <None>

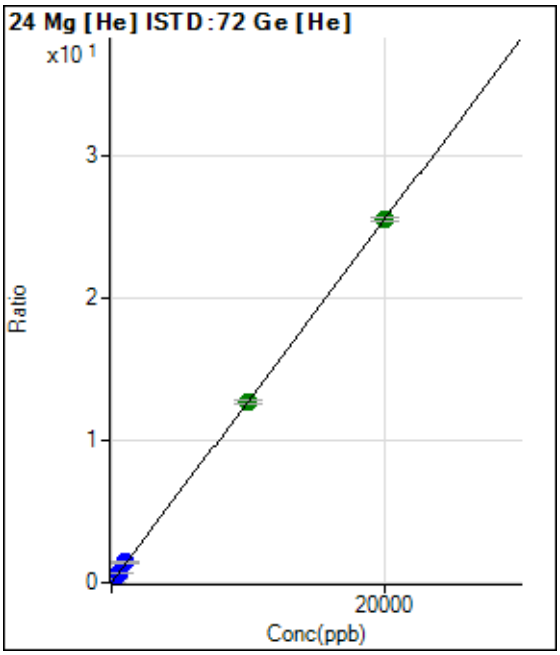


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86959.78	0.1951	P	2.8
2	☐	200.000	217.887	284565.36	0.6359	P	1.0
3	☐	500.000	539.754	572491.38	1.2871	P	3.0
4	☐	1000.000	1067.937	1053688.42	2.3557	A	2.1
5	☐	10000.000	9798.896	9027045.28	20.0203	A	2.1
6	☐	20000.000	20095.983	18022090.57	40.8535	A	1.5

y = 0.0020 * x + 0.1951
R = 0.9999
DL = 8.027
BEC = 96.42

Weight: <None>
Min Conc: <None>

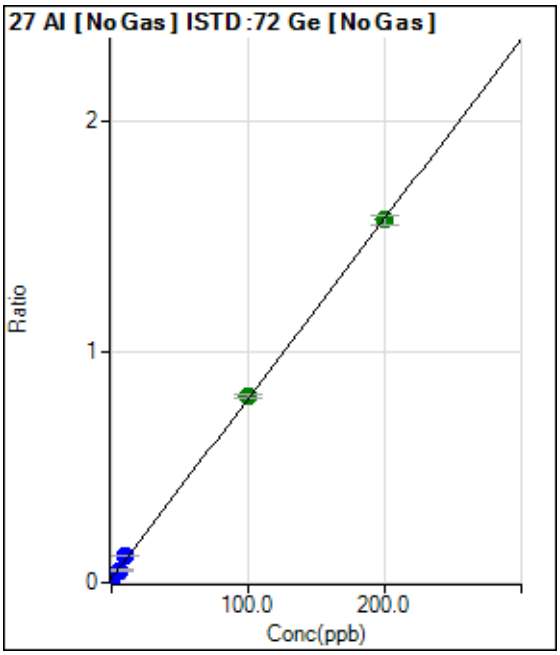
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	553.36	0.0012	P	14.6
2	☐	200.000	220.014	125884.97	0.2813	P	1.0
3	☐	500.000	546.504	309972.79	0.6969	P	3.3
4	☐	1000.000	1114.863	635333.04	1.4204	P	1.4
5	☐	10000.000	9997.902	5739005.96	12.7282	A	2.1
6	☐	20000.000	19993.943	11227838.58	25.4527	A	1.0

y = 0.0013 * x + 0.0012
R = 1.0000
DL = 0.4281
BEC = 0.9765

Weight: <None>
Min Conc: <None>

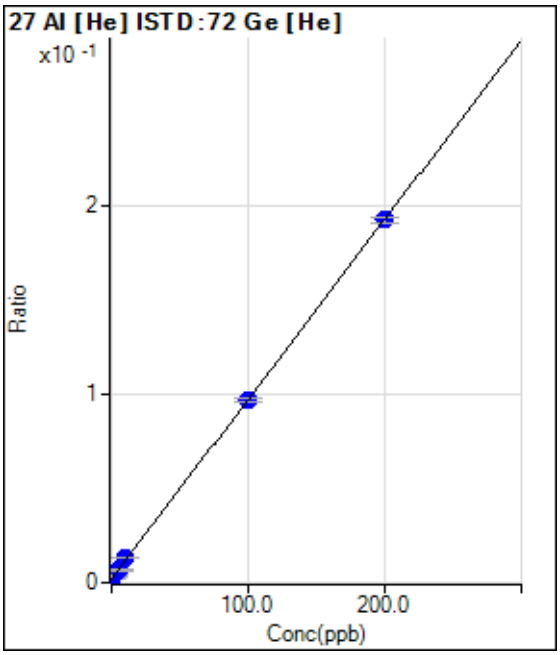


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30128.94	0.0182	P	21.8
2	☐	2.000	1.740	52824.22	0.0318	P	2.0
3	☐	5.000	4.567	88517.91	0.0538	P	3.3
4	☐	10.000	12.333	187166.62	0.1143	P	2.0
5	☐	100.000	100.993	1322031.33	0.8050	A	2.1
6	☐	200.000	199.400	2528100.79	1.5717	A	2.9

y = 0.0078 * x + 0.0182
R = 0.9999
DL = 1.524
BEC = 2.335

Weight: <None>
Min Conc: <None>

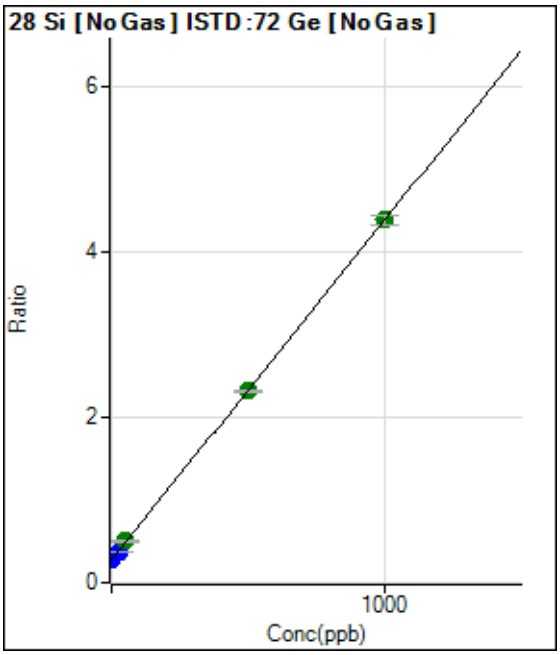
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	893.38	0.0020	P	1.5
2	☐	2.000	1.780	1656.79	0.0037	P	7.8
3	☐	5.000	5.125	3070.39	0.0069	P	7.7
4	☐	10.000	12.039	6038.08	0.0135	P	1.9
5	☐	100.000	99.917	43922.98	0.0974	P	2.5
6	☐	200.000	199.938	85102.77	0.1929	P	1.9

y = 9.5492E-004 * x + 0.0020
R = 0.9999
DL = 0.09316
BEC = 2.098

Weight: <None>
Min Conc: <None>

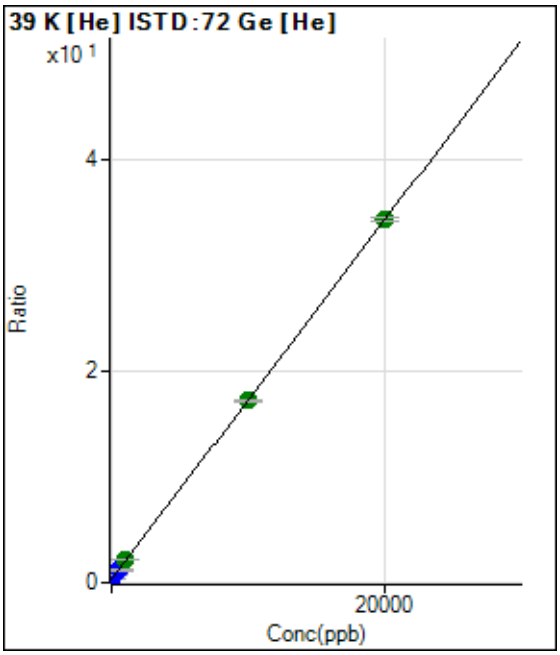


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	455535.12	0.2759	P	2.0
2	☐	10.000	10.274	529164.34	0.3181	P	0.1
3	☐	25.000	26.032	630134.14	0.3828	P	0.2
4	☐	50.000	56.561	832037.62	0.5080	A	3.4
5	☐	500.000	497.707	3807675.67	2.3185	A	0.8
6	☐	1000.000	1000.790	7049298.23	4.3832	A	2.5

y = 0.0041 * x + 0.2759
R = 1.0000
DL = 4.119
BEC = 67.23

Weight: <None>
Min Conc: <None>

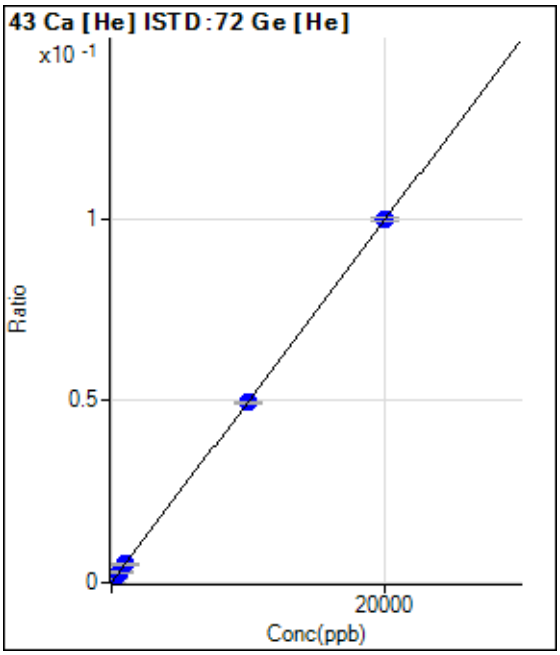
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134782.68	0.3024	P	2.7
2	☐	200.000	210.679	295504.74	0.6604	P	1.6
3	☐	500.000	526.179	532195.32	1.1965	P	3.1
4	☐	1000.000	1064.903	944675.84	2.1120	A	0.1
5	☐	10000.000	9945.983	7757721.55	17.2044	A	1.3
6	☐	20000.000	20023.002	15143691.02	34.3292	A	1.1

y = 0.0017 * x + 0.3024
R = 1.0000
DL = 14.57
BEC = 177.9

Weight: <None>
Min Conc: <None>

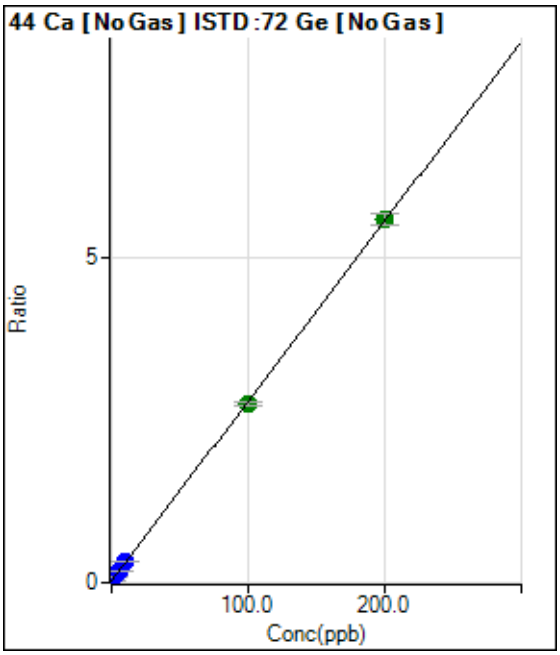


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0001	P	76.4
2	☐	200.000	197.604	473.35	0.0011	P	23.1
3	☐	500.000	550.275	1250.08	0.0028	P	11.5
4	☐	1000.000	1003.269	2266.90	0.0051	P	3.5
5	☐	10000.000	9935.811	22331.72	0.0495	P	1.8
6	☐	20000.000	20030.698	44010.66	0.0998	P	1.1

y = 4.9770E-006 * x + 7.4864E-005
R = 1.0000
DL = 34.47
BEC = 15.04

Weight: <None>
Min Conc: <None>

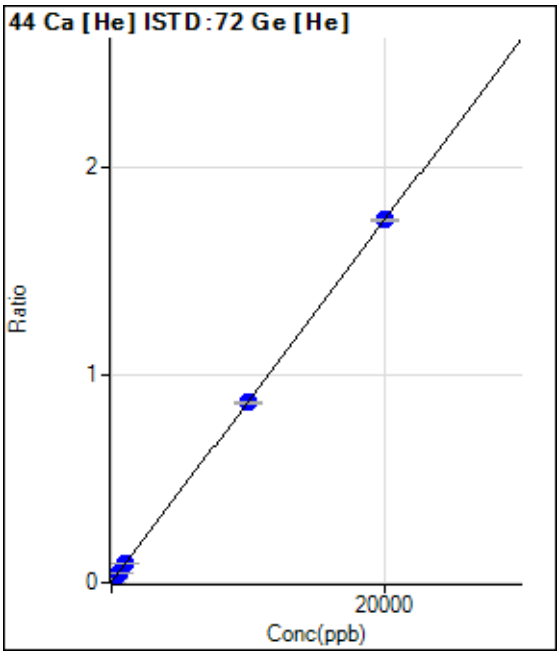
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41863.89	0.0254	P	4.0
2	☐	2.000	2.055	136602.44	0.0821	P	0.7
3	☐	5.000	5.114	274228.41	0.1666	P	2.8
4	☐	10.000	10.441	513913.86	0.3137	P	1.3
5	☐	100.000	98.296	4499935.04	2.7402	A	1.9
6	☐	200.000	200.827	8961082.78	5.5721	A	3.3

y = 0.0276 * x + 0.0254
R = 0.9999
DL = 0.1115
BEC = 0.9183

Weight: <None>
Min Conc: <None>

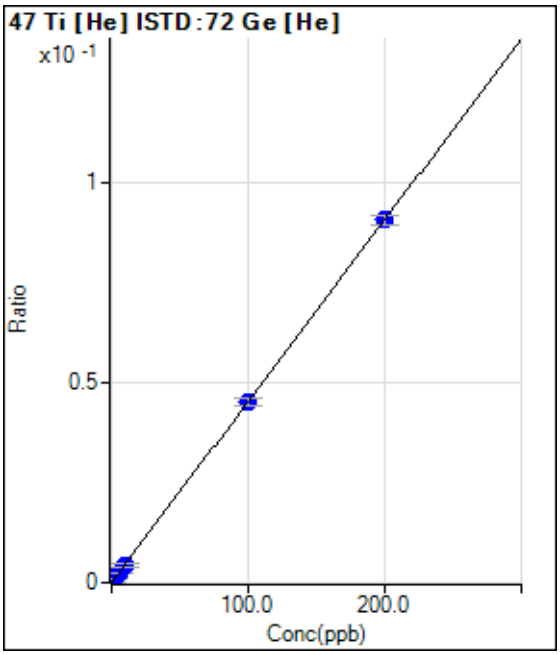


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	726.70	0.0016	P	8.6
2	☐	200.000	202.588	8619.51	0.0193	P	3.5
3	☐	500.000	502.285	20171.67	0.0453	P	2.2
4	☐	1000.000	1028.443	40757.47	0.0911	P	2.6
5	☐	10000.000	9943.085	390883.90	0.8669	P	1.4
6	☐	20000.000	20026.953	769485.38	1.7443	P	0.5

y = 8.7018E-005 * x + 0.0016
R = 1.0000
DL = 4.84
BEC = 18.75

Weight: <None>
Min Conc: <None>

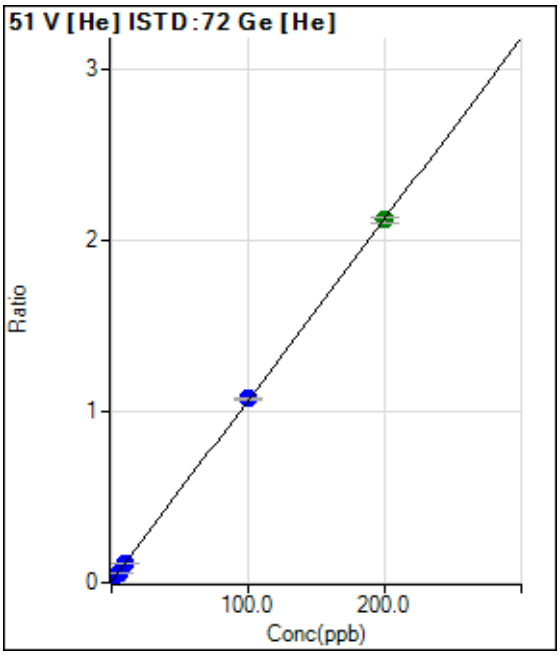
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.00	0.0000	P	99.0
2	☐	2.000	2.259	476.68	0.0011	P	24.0
3	☐	5.000	5.088	1043.40	0.0023	P	3.7
4	☐	10.000	9.547	1950.17	0.0044	P	13.3
5	☐	100.000	99.780	20355.39	0.0451	P	4.1
6	☐	200.000	200.128	39921.62	0.0905	P	2.3

y = 4.5202E-004 * x + 4.4433E-005
R = 1.0000
DL = 0.292
BEC = 0.0983

Weight: <None>
Min Conc: <None>

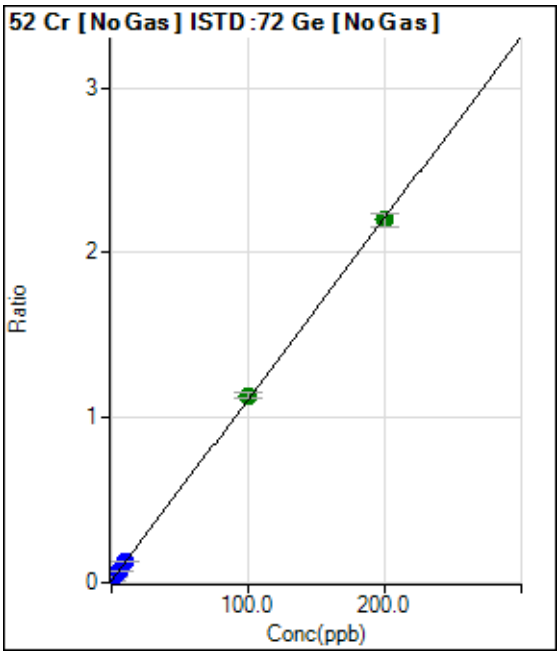


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3320.43	0.0074	P	4.1
2	☐	2.000	2.041	13012.88	0.0291	P	1.8
3	☐	5.000	5.000	26877.44	0.0604	P	3.1
4	☐	10.000	10.256	51940.24	0.1161	P	1.0
5	☐	100.000	100.782	484927.93	1.0754	P	0.9
6	☐	200.000	199.596	936266.15	2.1225	A	1.5

y = 0.0106 * x + 0.0074
R = 1.0000
DL = 0.08686
BEC = 0.703

Weight: <None>
Min Conc: <None>

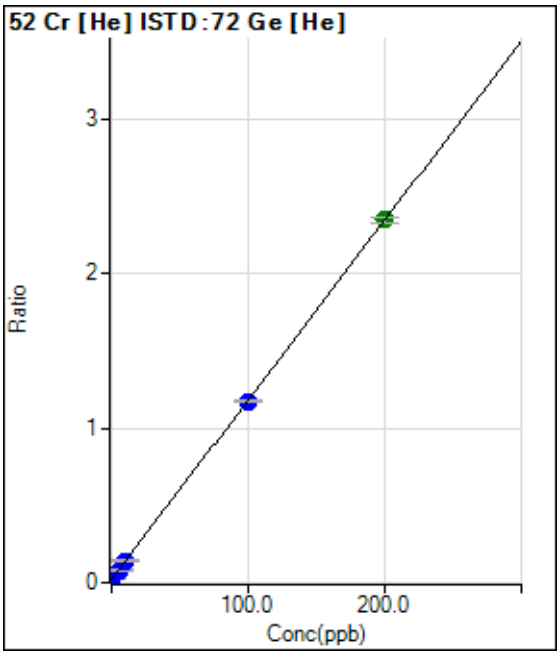
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20589.12	0.0125	P	3.7
2	☐	2.000	2.017	57621.60	0.0346	P	1.9
3	☐	5.000	4.963	110305.55	0.0670	P	1.5
4	☐	10.000	10.097	202174.44	0.1234	P	1.6
5	☐	100.000	102.067	1862400.07	1.1341	A	3.2
6	☐	200.000	198.963	3536097.76	2.1989	A	3.6

y = 0.0110 * x + 0.0125
R = 0.9999
DL = 0.1259
BEC = 1.135

Weight: <None>
Min Conc: <None>

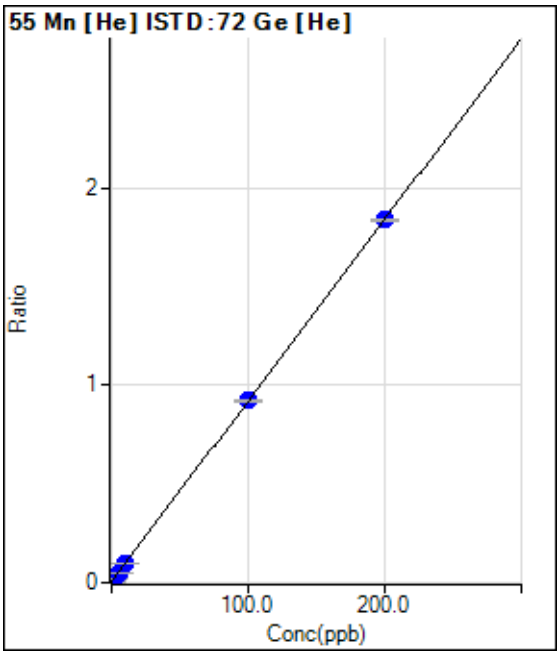


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9313.35	0.0209	P	1.5
2	☐	2.000	2.076	20111.81	0.0449	P	4.8
3	☐	5.000	5.145	35823.77	0.0805	P	3.0
4	☐	10.000	10.506	63829.08	0.1427	P	2.1
5	☐	100.000	99.281	528527.53	1.1721	P	0.8
6	☐	200.000	200.330	1033843.27	2.3438	A	1.9

y = 0.0116 * x + 0.0209
R = 1.0000
DL = 0.08021
BEC = 1.801

Weight: <None>
Min Conc: <None>

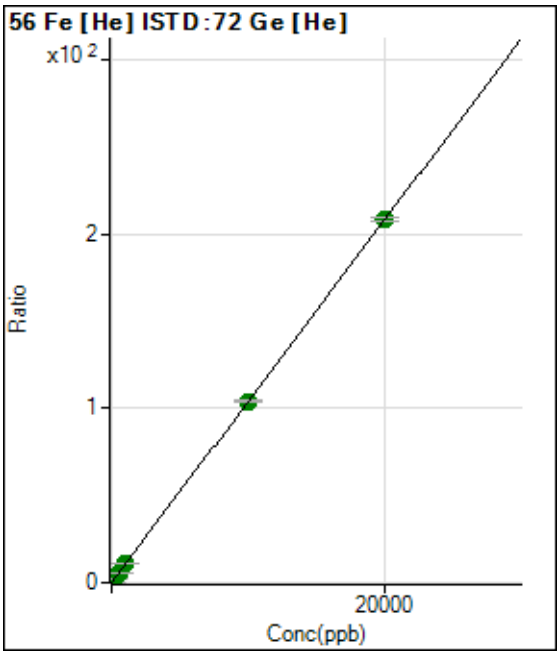
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2120.21	0.0048	P	7.6
2	☐	2.000	2.085	10684.34	0.0239	P	3.7
3	☐	5.000	5.186	23253.35	0.0523	P	4.8
4	☐	10.000	10.483	45108.15	0.1008	P	2.4
5	☐	100.000	100.063	415734.94	0.9220	P	1.7
6	☐	200.000	199.939	810623.37	1.8375	P	0.5

y = 0.0092 * x + 0.0048
R = 1.0000
DL = 0.1182
BEC = 0.5186

Weight: <None>
Min Conc: <None>

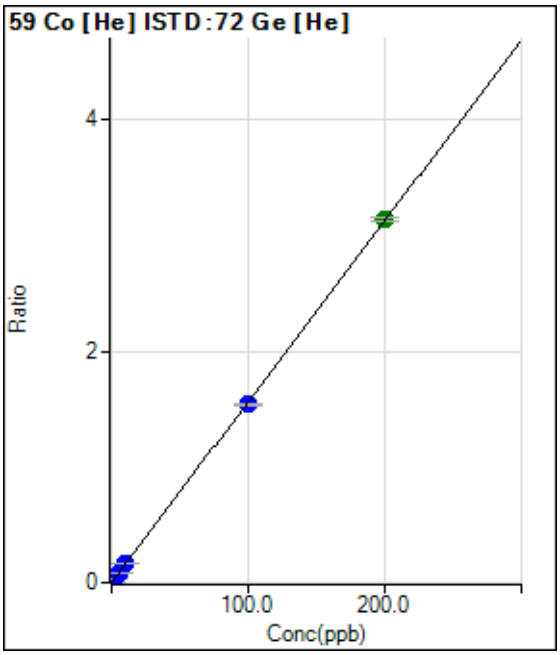


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18673.03	0.0419	P	1.7
2	☐	200.000	212.424	1006973.16	2.2505	A	2.7
3	☐	500.000	515.619	2403079.55	5.4029	A	3.2
4	☐	1000.000	1040.199	4856128.88	10.8570	A	0.8
5	☐	10000.000	9979.106	46804955.97	103.7963	A	1.0
6	☐	20000.000	20007.923	91791481.96	208.0675	A	1.1

y = 0.0104 * x + 0.0419
R = 1.0000
DL = 0.2058
BEC = 4.028

Weight: <None>
Min Conc: <None>

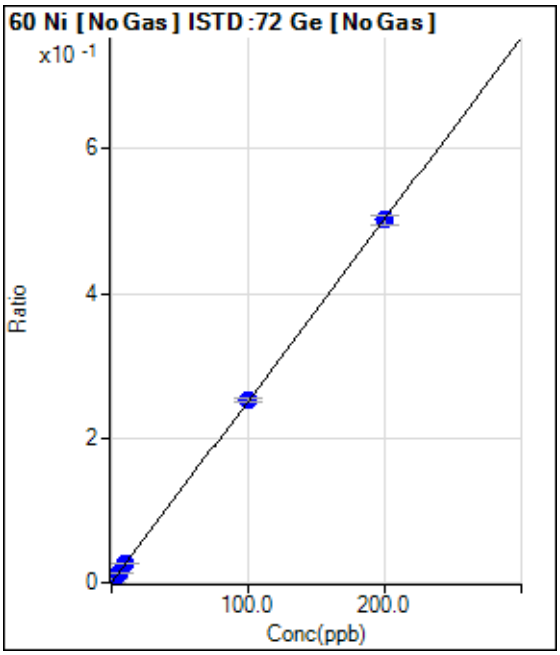
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	256.68	0.0006	P	5.9
2	☐	2.000	1.982	14104.23	0.0315	P	2.3
3	☐	5.000	5.138	35927.70	0.0808	P	3.3
4	☐	10.000	10.295	72133.84	0.1613	P	1.0
5	☐	100.000	98.549	693865.77	1.5388	P	1.8
6	☐	200.000	200.708	1382350.40	3.1335	A	0.9

y = 0.0156 * x + 5.7563E-004
R = 1.0000
DL = 0.006488
BEC = 0.03688

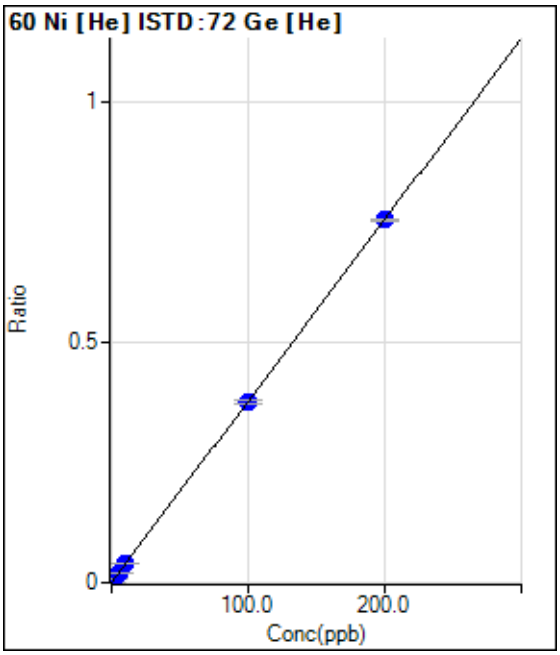
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	410.02	0.0002	P	25.0
2	☐	2.000	2.001	8776.32	0.0053	P	1.8
3	☐	5.000	5.131	21624.22	0.0131	P	3.0
4	☐	10.000	10.498	43593.45	0.0266	P	2.2
5	☐	100.000	100.525	415025.97	0.2527	P	2.4
6	☐	200.000	199.709	807143.95	0.5019	P	2.4

y = 0.0025 * x + 2.4812E-004
R = 1.0000
DL = 0.07402
BEC = 0.09878

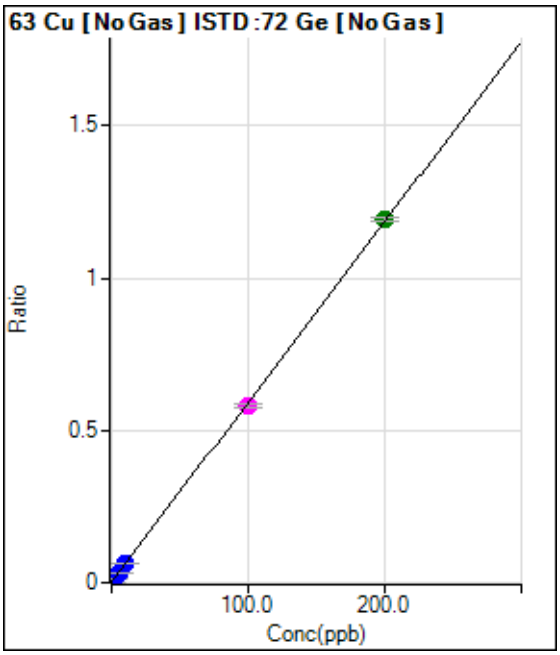
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	203.34	0.0005	P	8.1
2	☐	2.000	1.984	3550.51	0.0079	P	6.3
3	☐	5.000	5.176	8889.70	0.0200	P	0.7
4	☐	10.000	10.544	17988.88	0.0402	P	0.5
5	☐	100.000	99.981	170217.95	0.3775	P	2.1
6	☐	200.000	199.978	332895.06	0.7546	P	0.2

y = 0.0038 * x + 4.5617E-004
R = 1.0000
DL = 0.0295
BEC = 0.121

Weight: <None>
Min Conc: <None>

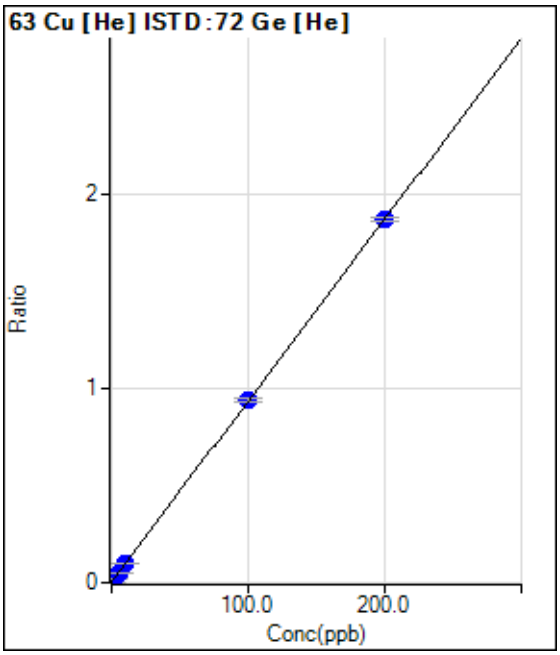


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2436.93	0.0015	P	3.7
2	☐	2.000	1.916	21300.41	0.0128	P	3.9
3	☐	5.000	4.913	50239.73	0.0305	P	2.3
4	☐	10.000	10.150	100691.68	0.0615	P	1.5
5	☐	100.000	97.724	951002.64	0.5791	M	2.7
6	☐	200.000	201.133	1914836.38	1.1904	A	1.0

y = 0.0059 * x + 0.0015
R = 0.9999
DL = 0.0277
BEC = 0.2497

Weight: <None>
Min Conc: <None>

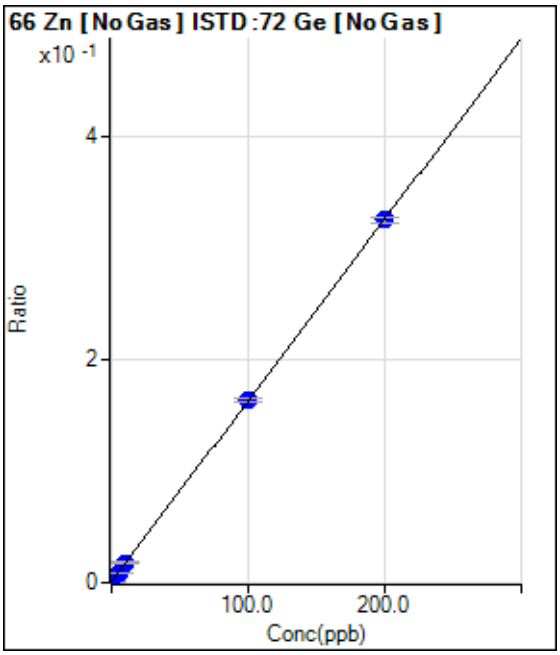
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1110.07	0.0025	P	6.2
2	☐	2.000	1.970	9363.40	0.0209	P	1.0
3	☐	5.000	5.000	21921.35	0.0493	P	0.9
4	☐	10.000	10.441	44804.15	0.1002	P	1.0
5	☐	100.000	100.315	424314.26	0.9410	P	1.9
6	☐	200.000	199.821	825861.99	1.8720	P	1.0

y = 0.0094 * x + 0.0025
R = 1.0000
DL = 0.04938
BEC = 0.266

Weight: <None>
Min Conc: <None>

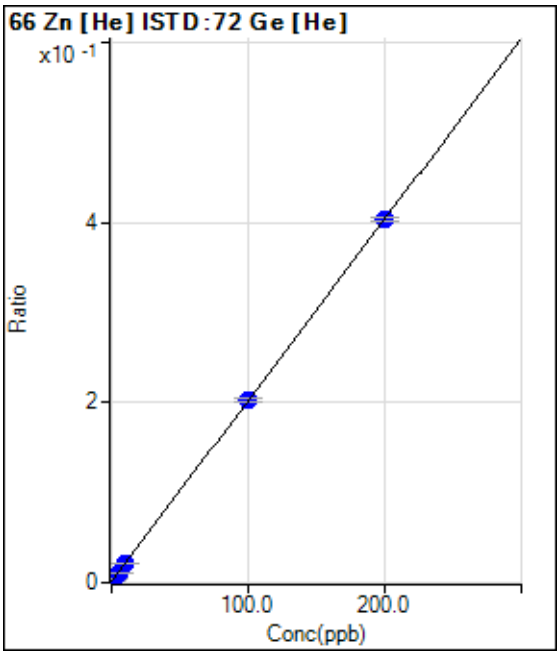


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1476.77	0.0009	P	8.4
2	☐	2.000	2.219	7478.87	0.0045	P	2.8
3	☐	5.000	4.960	14721.58	0.0089	P	5.7
4	☐	10.000	10.601	29636.13	0.0181	P	3.1
5	☐	100.000	100.140	268287.76	0.1634	P	2.1
6	☐	200.000	199.899	523135.51	0.3252	P	1.6

y = 0.0016 * x + 8.9532E-004
R = 1.0000
DL = 0.1384
BEC = 0.5518

Weight: <None>
Min Conc: <None>

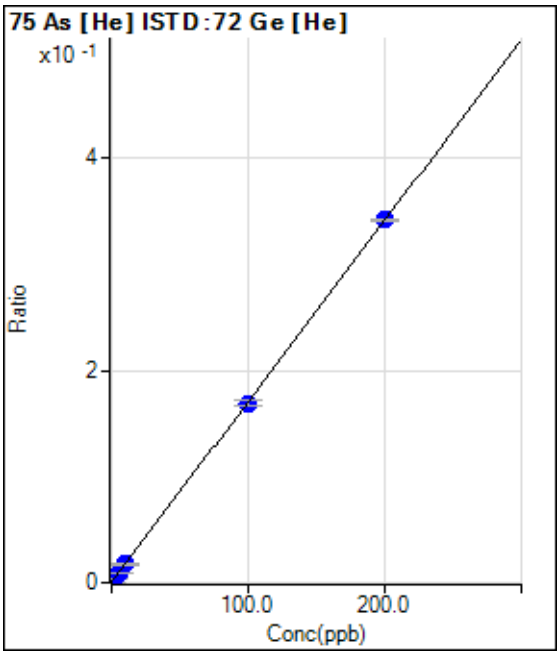
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	536.69	0.0012	P	16.5
2	☐	2.000	1.931	2276.90	0.0051	P	6.4
3	☐	5.000	5.082	5084.39	0.0114	P	4.2
4	☐	10.000	10.413	9913.74	0.0222	P	0.5
5	☐	100.000	100.402	91678.41	0.2033	P	1.5
6	☐	200.000	199.777	177933.42	0.4034	P	1.0

y = 0.0020 * x + 0.0012
R = 1.0000
DL = 0.2958
BEC = 0.5973

Weight: <None>
Min Conc: <None>

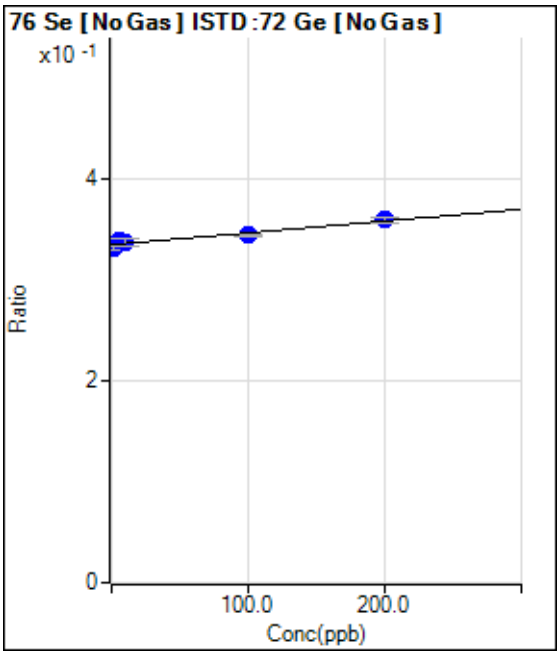


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	188.89	0.0004	P	18.4
2	☐	2.000	2.170	1843.47	0.0041	P	5.0
3	☐	5.000	4.850	3863.90	0.0087	P	3.0
4	☐	10.000	9.942	7762.27	0.0174	P	3.1
5	☐	100.000	99.184	76345.71	0.1693	P	2.2
6	☐	200.000	200.413	150737.53	0.3417	P	0.5

y = 0.0017 * x + 4.2414E-004
R = 1.0000
DL = 0.1376
BEC = 0.2491

Weight: <None>
Min Conc: <None>

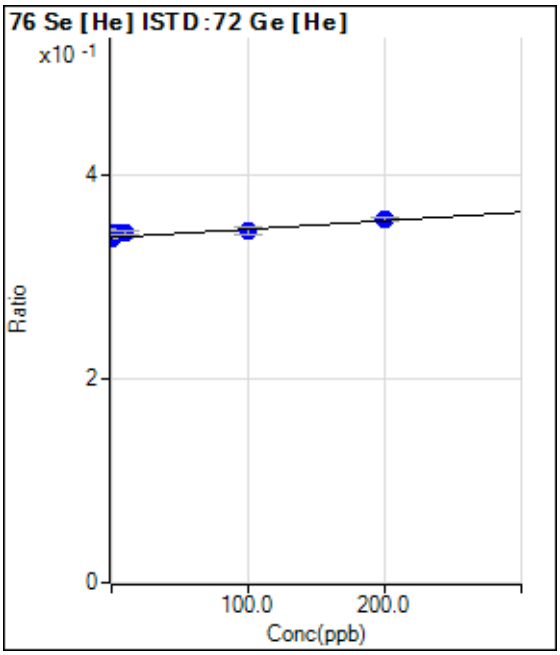
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	553489.55	0.3352	P	1.9
2	☐	2.000	-24.096	552982.95	0.3324	P	1.3
3	☐	5.000	27.948	557251.24	0.3385	P	1.3
4	☐	10.000	21.952	553266.97	0.3378	P	2.0
5	☐	100.000	79.813	565876.10	0.3446	P	0.6
6	☐	200.000	209.183	578582.65	0.3597	P	1.3

y = 1.1702E-004 * x + 0.3352
R = 0.9737
DL = 159.7
BEC = 2865

Weight: <None>
Min Conc: <None>

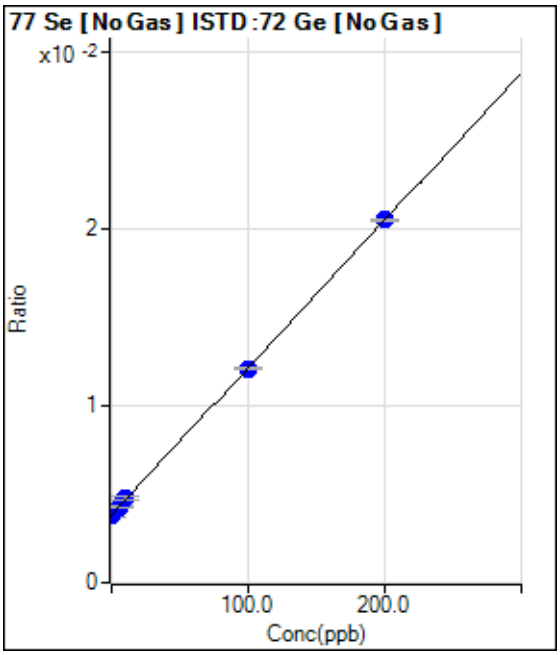


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	151214.33	0.3392	P	2.0
2	☐	2.000	62.886	154131.23	0.3444	P	1.0
3	☐	5.000	46.194	152585.58	0.3430	P	2.7
4	☐	10.000	53.558	153702.19	0.3436	P	0.9
5	☐	100.000	75.313	155759.00	0.3454	P	2.3
6	☐	200.000	208.527	157279.96	0.3565	P	1.2

y = 8.3218E-005 * x + 0.3392
R = 0.9208
DL = 239.2
BEC = 4076

Weight: <None>
Min Conc: <None>

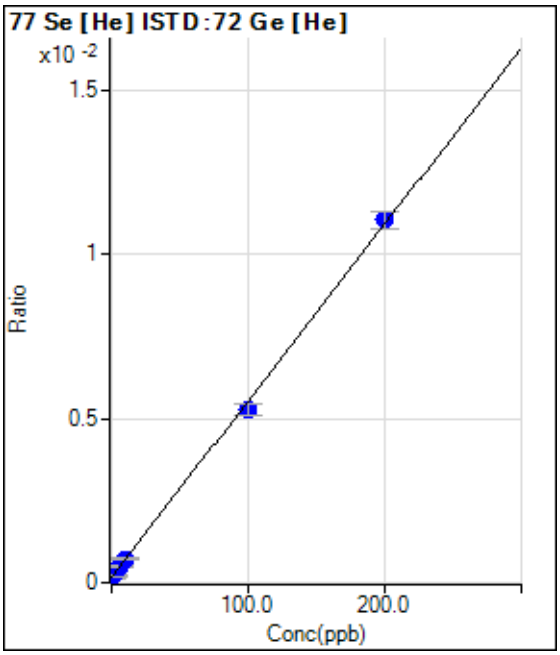
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6324.95	0.0038	P	4.4
2	☐	2.000	2.381	6705.12	0.0040	P	2.3
3	☐	5.000	5.197	7021.94	0.0043	P	1.9
4	☐	10.000	11.442	7835.72	0.0048	P	2.7
5	☐	100.000	99.456	19891.60	0.0121	P	0.7
6	☐	200.000	200.191	32973.99	0.0205	P	0.7

y = 8.3252E-005 * x + 0.0038
R = 1.0000
DL = 6.077
BEC = 46.03

Weight: <None>
Min Conc: <None>

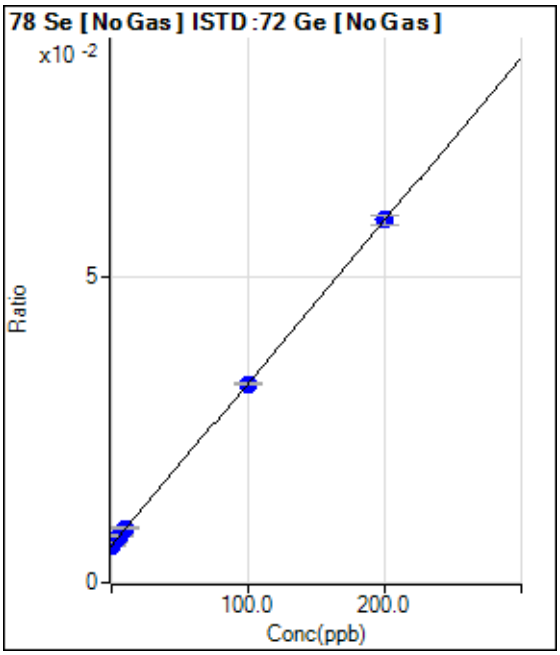


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	73.33	0.0002	P	42.7
2	☐	2.000	1.090	100.00	0.0002	P	27.0
3	☐	5.000	5.983	216.67	0.0005	P	12.3
4	☐	10.000	10.395	323.34	0.0007	P	12.6
5	☐	100.000	94.761	2366.92	0.0053	P	6.3
6	☐	200.000	202.584	4867.66	0.0110	P	4.9

y = 5.3660E-005 * x + 1.6520E-004
R = 0.9995
DL = 3.946
BEC = 3.079

Weight: <None>
Min Conc: <None>

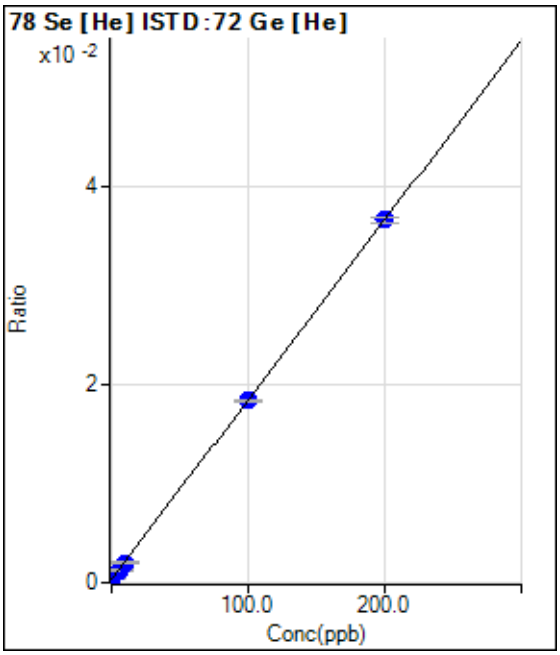
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10027.23	0.0061	P	6.1
2	☐	2.000	2.155	11058.06	0.0066	P	3.1
3	☐	5.000	5.960	12609.41	0.0077	P	3.1
4	☐	10.000	10.635	14584.79	0.0089	P	1.7
5	☐	100.000	99.363	53419.30	0.0325	P	0.5
6	☐	200.000	200.261	95503.94	0.0594	P	2.8

y = 2.6621E-004 * x + 0.0061
R = 1.0000
DL = 4.188
BEC = 22.81

Weight: <None>
Min Conc: <None>

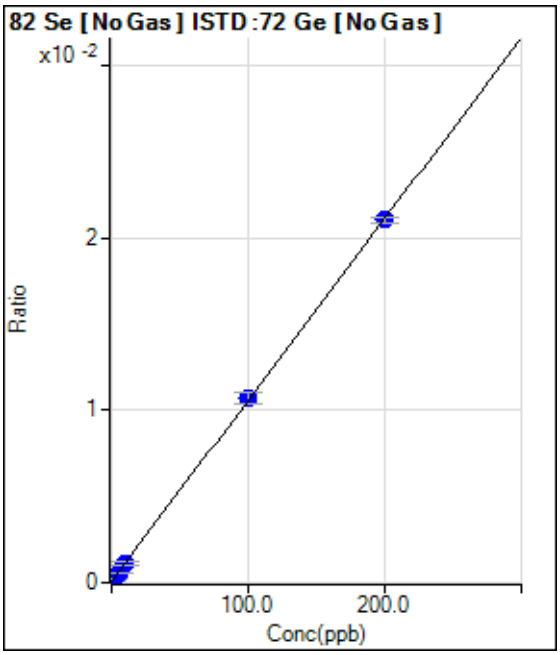


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	149.33	0.0003	P	0.2
2	☐	2.000	2.075	318.00	0.0007	P	4.4
3	☐	5.000	4.992	550.68	0.0012	P	8.2
4	☐	10.000	9.354	907.37	0.0020	P	4.6
5	☐	100.000	99.668	8289.24	0.0184	P	0.9
6	☐	200.000	200.198	16140.34	0.0366	P	1.6

y = 1.8108E-004 * x + 3.3489E-004
R = 1.0000
DL = 0.009386
BEC = 1.849

Weight: <None>
Min Conc: <None>

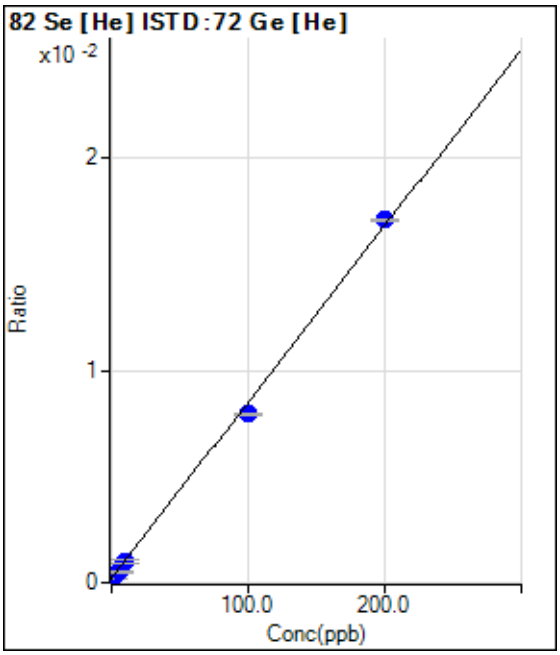
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.39	0.0001	P	44.0
2	☐	2.000	1.627	427.77	0.0003	P	21.3
3	☐	5.000	4.386	900.91	0.0005	P	2.7
4	☐	10.000	9.980	1861.38	0.0011	P	13.8
5	☐	100.000	100.958	17570.57	0.0107	P	6.0
6	☐	200.000	199.541	33888.37	0.0211	P	1.5

y = 1.0516E-004 * x + 8.5955E-005
R = 1.0000
DL = 1.078
BEC = 0.8174

Weight: <None>
Min Conc: <None>

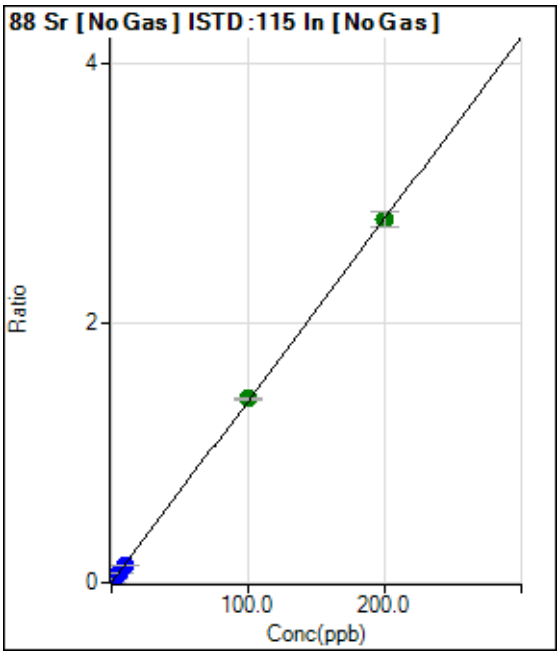


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0002	P	25.3
2	☐	2.000	0.994	130.00	0.0003	P	51.3
3	☐	5.000	3.537	223.34	0.0005	P	7.0
4	☐	10.000	9.337	440.02	0.0010	P	13.7
5	☐	100.000	93.305	3587.20	0.0080	P	0.9
6	☐	200.000	203.428	7542.26	0.0171	P	0.7

y = 8.3017E-005 * x + 2.0875E-004
R = 0.9993
DL = 1.909
BEC = 2.515

Weight: <None>
Min Conc: <None>

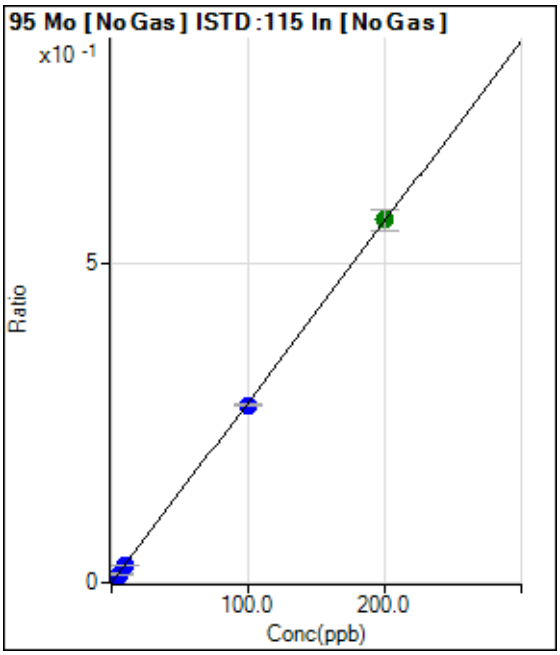
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	960.05	0.0005	P	16.0
2	☐	2.000	1.970	50512.04	0.0281	P	1.6
3	☐	5.000	4.913	124119.42	0.0692	P	2.0
4	☐	10.000	9.919	253823.07	0.1393	P	1.2
5	☐	100.000	101.052	2510481.63	1.4139	A	1.6
6	☐	200.000	199.481	4878672.53	2.7906	A	4.3

y = 0.0140 * x + 5.2830E-004
R = 1.0000
DL = 0.01812
BEC = 0.03777

Weight: <None>
Min Conc: <None>

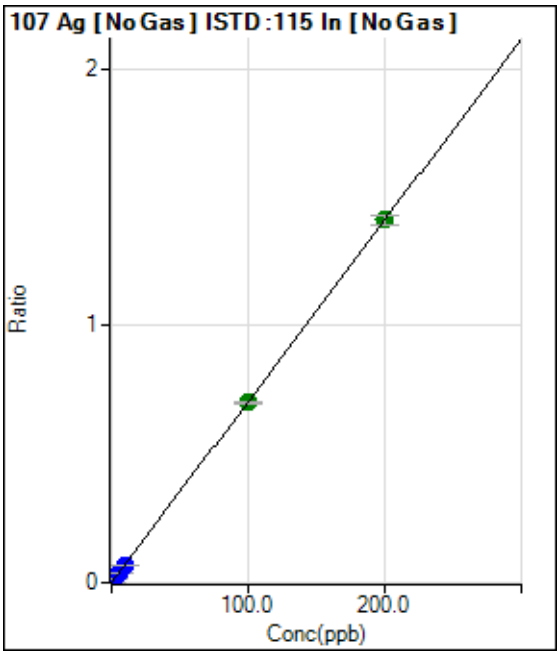


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0001	P	39.7
2	☐	2.000	1.959	10114.05	0.0056	P	2.5
3	☐	5.000	4.754	24239.11	0.0135	P	0.8
4	☐	10.000	9.608	49632.65	0.0272	P	3.4
5	☐	100.000	98.251	493075.03	0.2777	P	0.9
6	☐	200.000	200.901	992250.17	0.5677	A	6.0

y = 0.0028 * x + 8.8156E-005
R = 0.9999
DL = 0.03714
BEC = 0.0312

Weight: <None>
Min Conc: <None>

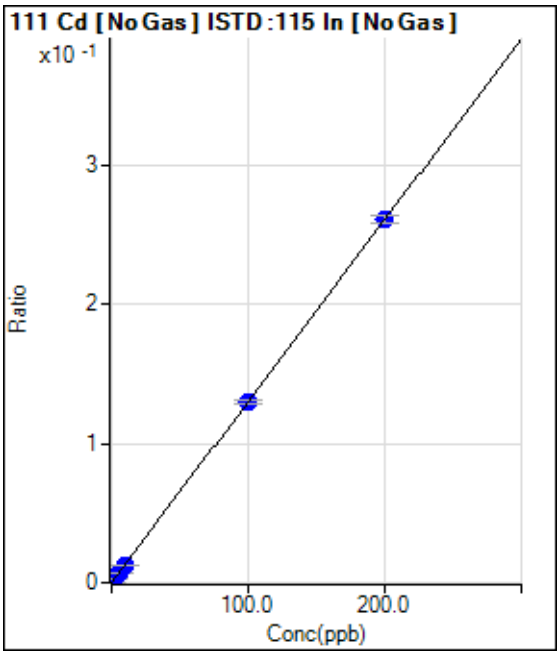
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	273.34	0.0002	P	12.4
2	☐	2.000	1.970	25230.97	0.0140	P	3.4
3	☐	5.000	4.827	61205.08	0.0341	P	2.0
4	☐	10.000	9.768	125656.80	0.0690	P	1.7
5	☐	100.000	99.436	1243848.00	0.7006	A	1.7
6	☐	200.000	200.298	2467270.85	1.4110	A	2.9

y = 0.0070 * x + 1.5040E-004
R = 1.0000
DL = 0.007962
BEC = 0.02135

Weight: <None>
Min Conc: <None>

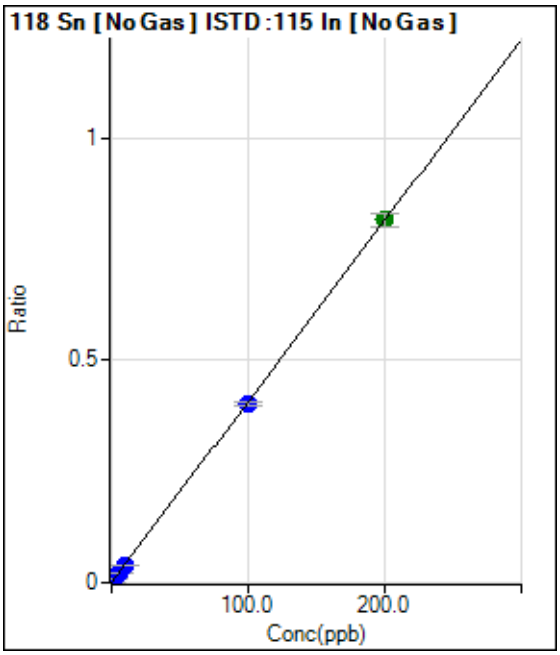


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.09	0.0000	P	519.1
2	☐	2.000	2.091	4897.53	0.0027	P	6.2
3	☐	5.000	4.917	11472.65	0.0064	P	2.1
4	☐	10.000	10.039	23816.03	0.0131	P	0.6
5	☐	100.000	99.744	230457.92	0.1298	P	2.5
6	☐	200.000	200.127	455494.20	0.2605	P	2.1

y = 0.0013 * x + 1.6415E-006
R = 1.0000
DL = 0.01964
BEC = 0.001261

Weight: <None>
Min Conc: <None>

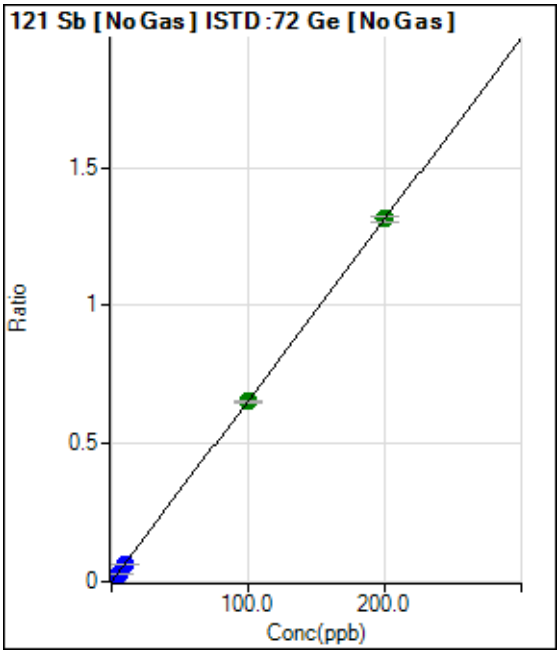
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1126.74	0.0006	P	10.3
2	☐	2.000	1.921	15159.02	0.0084	P	4.6
3	☐	5.000	4.940	37096.21	0.0207	P	1.8
4	☐	10.000	9.795	73686.40	0.0404	P	0.6
5	☐	100.000	99.225	717080.82	0.4039	P	2.2
6	☐	200.000	200.400	1425150.03	0.8151	A	3.6

y = 0.0041 * x + 6.1972E-004
R = 1.0000
DL = 0.04695
BEC = 0.1525

Weight: <None>
Min Conc: <None>

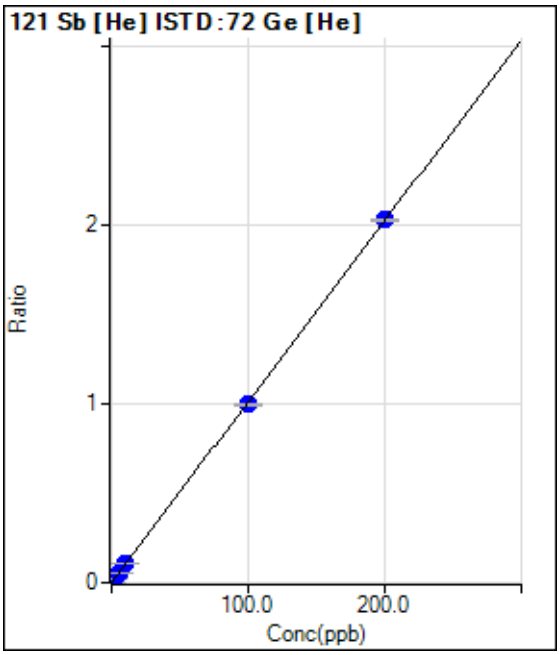


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	130.00	0.0001	P	47.7
2	☐	2.000	1.974	21668.32	0.0130	P	1.0
3	☐	5.000	4.710	50979.60	0.0310	P	2.0
4	☐	10.000	9.972	107236.83	0.0655	P	1.7
5	☐	100.000	99.410	1070641.34	0.6519	A	1.4
6	☐	200.000	200.304	2112681.53	1.3135	A	1.8

y = 0.0066 * x + 7.9130E-005
R = 1.0000
DL = 0.01725
BEC = 0.01207

Weight: <None>
Min Conc: <None>

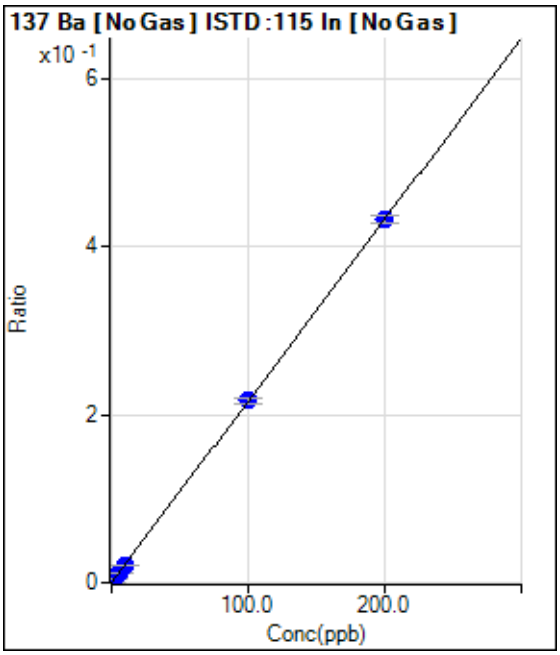
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	73.33	0.0002	P	78.2
2	☐	2.000	2.027	9250.11	0.0207	P	5.3
3	☐	5.000	4.881	22042.15	0.0496	P	4.0
4	☐	10.000	10.175	46134.77	0.1031	P	1.1
5	☐	100.000	98.676	450410.24	0.9988	P	0.7
6	☐	200.000	200.656	895929.34	2.0310	P	0.6

y = 0.0101 * x + 1.6304E-004
R = 1.0000
DL = 0.03779
BEC = 0.01611

Weight: <None>
Min Conc: <None>

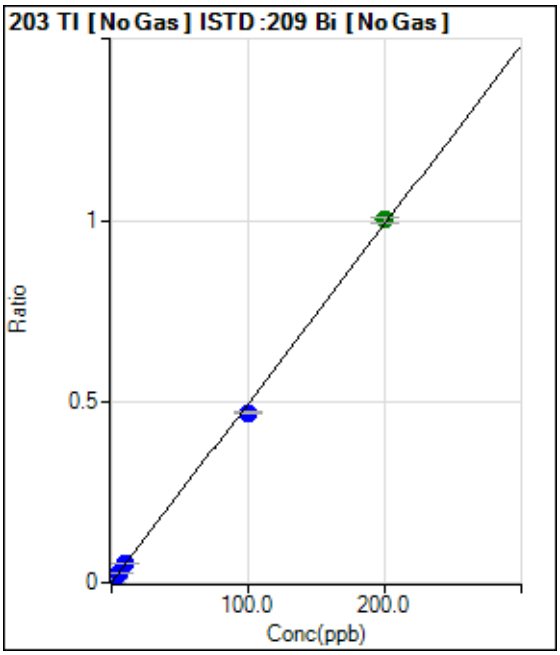


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.34	0.0001	P	6.2
2	☐	2.000	1.974	7932.55	0.0044	P	5.8
3	☐	5.000	5.009	19671.86	0.0110	P	1.2
4	☐	10.000	9.824	38975.53	0.0214	P	0.7
5	☐	100.000	100.188	384781.21	0.2167	P	2.3
6	☐	200.000	199.915	756073.03	0.4323	P	2.1

y = 0.0022 * x + 1.4484E-004
R = 1.0000
DL = 0.01237
BEC = 0.067

Weight: <None>
Min Conc: <None>

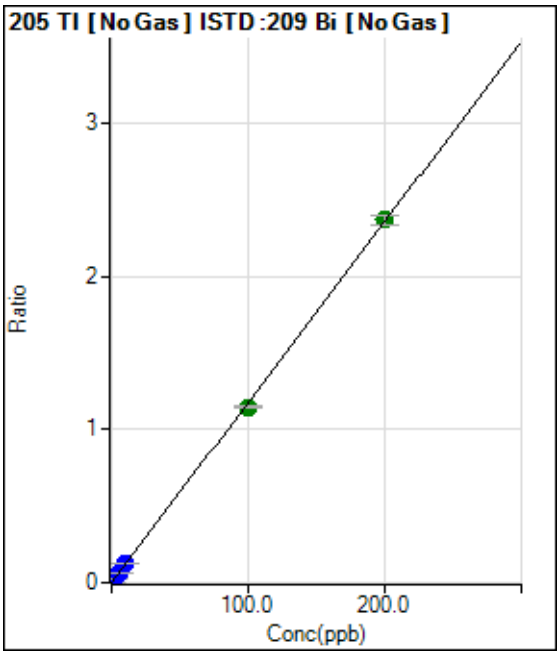
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	766.71	0.0005	P	10.2
2	☐	2.000	2.124	17319.06	0.0110	P	4.4
3	☐	5.000	5.299	43536.24	0.0267	P	1.7
4	☐	10.000	10.703	85293.95	0.0534	P	1.7
5	☐	100.000	94.931	754834.94	0.4696	P	0.6
6	☐	200.000	202.491	1553010.24	1.0011	A	1.5

y = 0.0049 * x + 4.8594E-004
R = 0.9995
DL = 0.03001
BEC = 0.09833

Weight: <None>
Min Conc: <None>

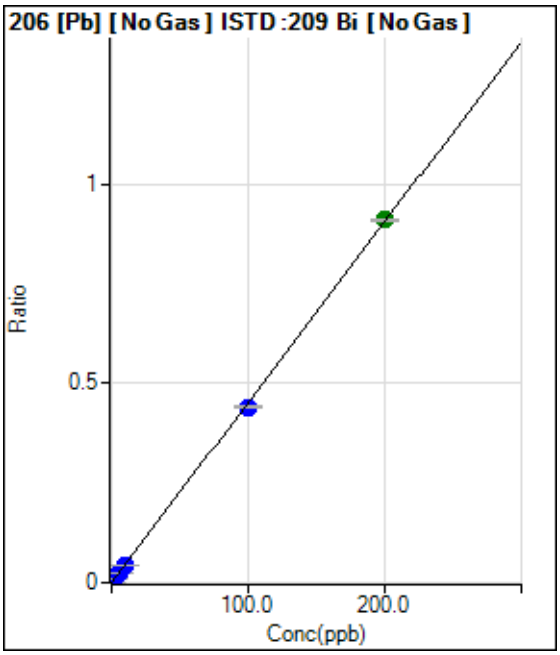


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1643.48	0.0010	P	4.6
2	☐	2.000	2.187	42312.26	0.0268	P	1.8
3	☐	5.000	5.295	103547.81	0.0634	P	3.1
4	☐	10.000	10.768	204429.05	0.1279	P	1.6
5	☐	100.000	97.454	1847792.32	1.1495	A	0.7
6	☐	200.000	201.226	3679637.55	2.3724	A	2.6

y = 0.0118 * x + 0.0010
R = 0.9999
DL = 0.01209
BEC = 0.08842

Weight: <None>
Min Conc: <None>

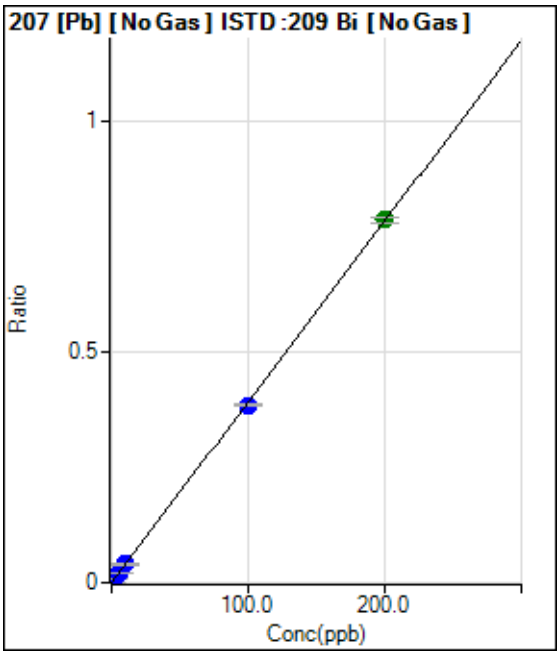
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	286.68	0.0002	P	21.9
2	☐	2.000	1.997	14518.63	0.0092	P	2.6
3	☐	5.000	4.874	36229.83	0.0222	P	2.6
4	☐	10.000	10.043	72785.65	0.0455	P	0.6
5	☐	100.000	97.345	707029.16	0.4399	P	1.3
6	☐	200.000	201.329	1411047.48	0.9096	A	0.6

y = 0.0045 * x + 1.8233E-004
R = 0.9999
DL = 0.02652
BEC = 0.04037

Weight: <None>
Min Conc: <None>

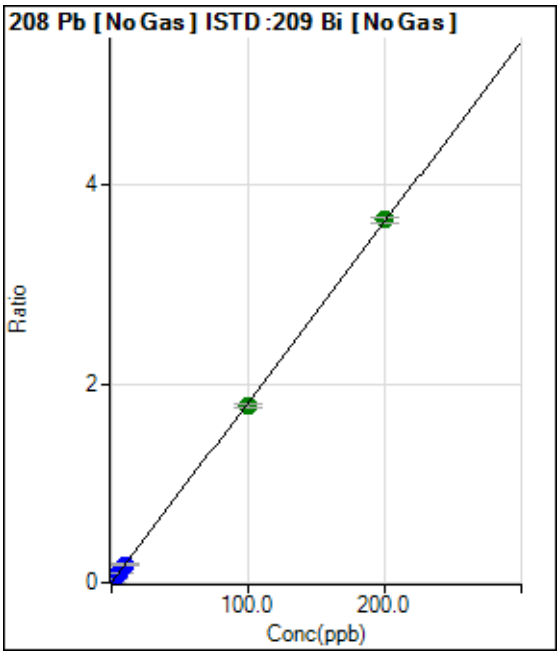


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	233.34	0.0001	P	28.9
2	☐	2.000	2.002	12596.59	0.0080	P	5.4
3	☐	5.000	4.907	31580.40	0.0193	P	1.8
4	☐	10.000	10.140	63622.48	0.0398	P	3.9
5	☐	100.000	98.394	619073.66	0.3851	P	1.2
6	☐	200.000	200.798	1218965.09	0.7858	A	1.7

y = 0.0039 * x + 1.4831E-004
R = 1.0000
DL = 0.03288
BEC = 0.0379

Weight: <None>
Min Conc: <None>

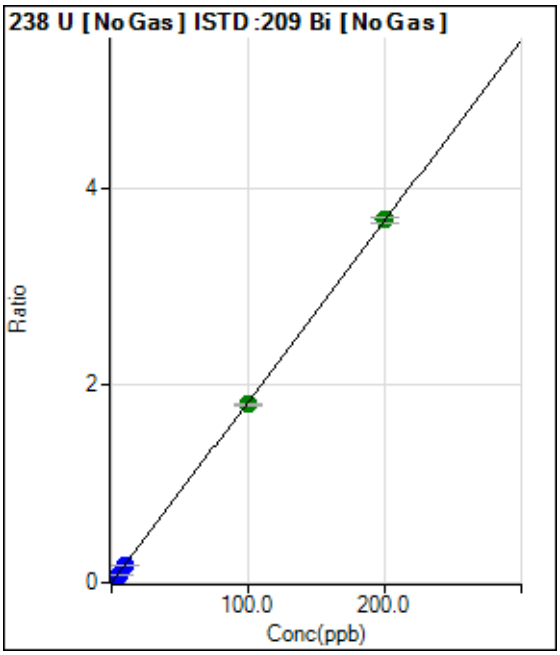
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1036.70	0.0007	P	12.1
2	☐	2.000	2.009	58545.32	0.0371	P	1.4
3	☐	5.000	4.826	143966.43	0.0882	P	2.5
4	☐	10.000	10.040	292080.46	0.1828	P	2.4
5	☐	100.000	97.770	2851971.03	1.7743	A	1.7
6	☐	200.000	201.117	5660511.90	3.6492	A	1.7

y = 0.0181 * x + 6.5831E-004
R = 0.9999
DL = 0.01316
BEC = 0.03629

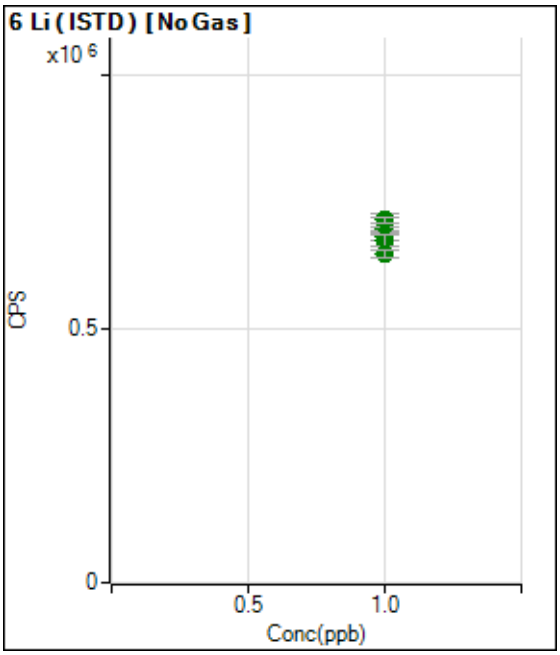
Weight: <None>
Min Conc: <None>



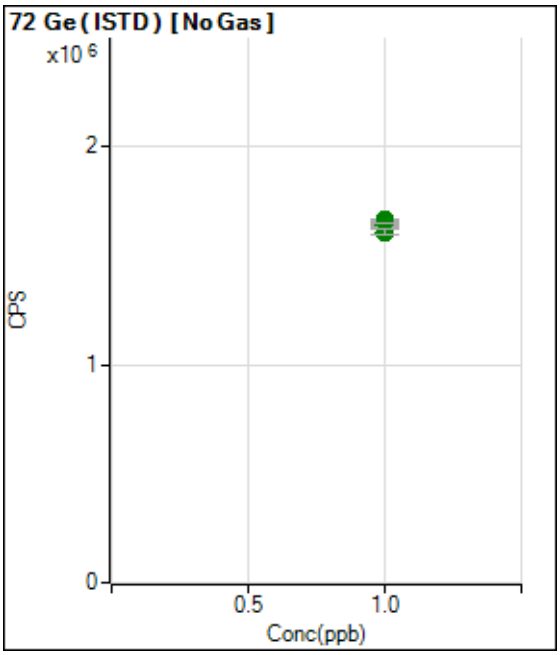
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0000	P	30.1
2	☐	2.000	1.956	56588.20	0.0359	P	0.6
3	☐	5.000	4.660	139307.21	0.0854	P	2.2
4	☐	10.000	9.838	287860.36	0.1802	P	2.5
5	☐	100.000	98.675	2903774.33	1.8066	A	1.2
6	☐	200.000	200.679	5699163.25	3.6741	A	1.9

y = 0.0183 * x + 3.8149E-005
R = 1.0000
DL = 0.001882
BEC = 0.002084

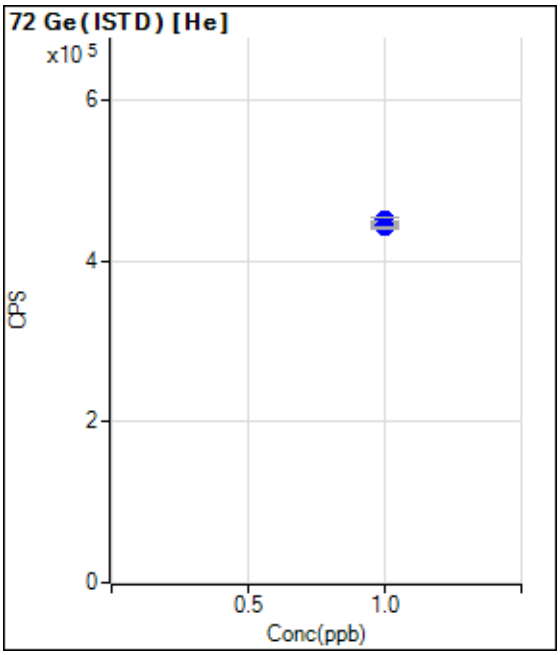
Weight: <None>
Min Conc: <None>



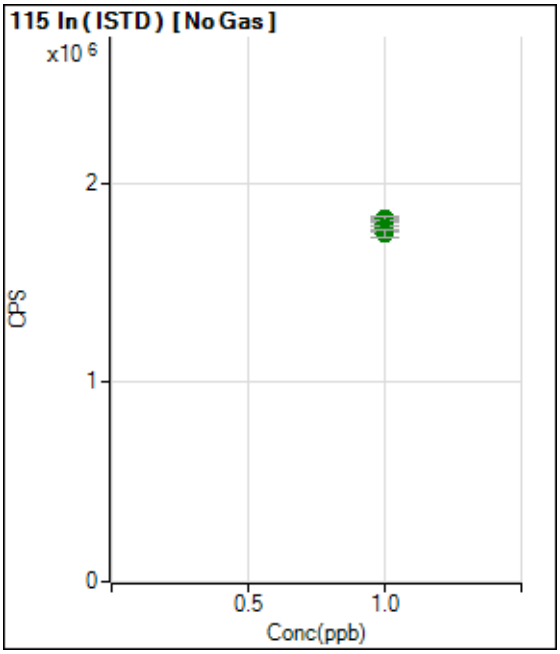
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		709618.94		A	4.9
2	☐	1.000		697970.69		A	1.1
3	☐	1.000		714558.31		A	1.9
4	☐	1.000		682365.03		A	2.2
5	☐	1.000		674683.02		A	3.7
6	☐	1.000		647735.25		A	1.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1651482.22		A	2.2
2	☐	1.000		1663622.99		A	0.4
3	☐	1.000		1646335.24		A	0.9
4	☐	1.000		1638277.16		A	2.0
5	☐	1.000		1642360.71		A	1.0
6	☐	1.000		1608707.89		A	1.7

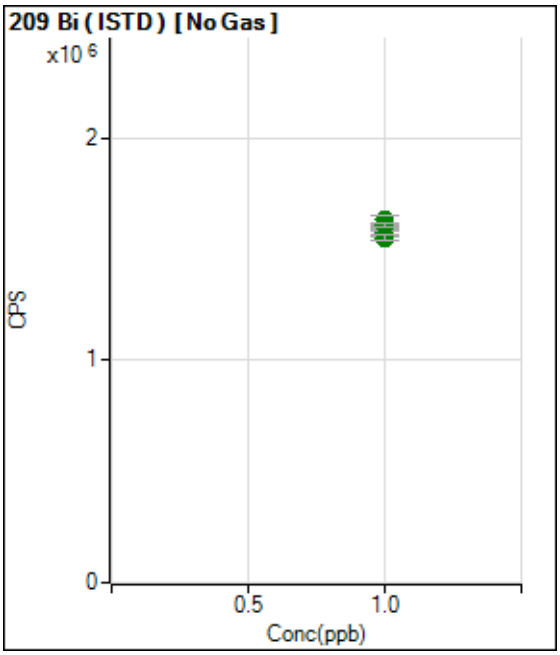


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		445920.07		P	1.7
2	☐	1.000		447517.49		P	0.9
3	☐	1.000		444959.43		P	2.0
4	☐	1.000		447282.71		P	0.1
5	☐	1.000		450948.26		P	0.9
6	☐	1.000		441148.98		P	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1818499.57		A	1.1
2	☐	1.000		1798815.50		A	1.2
3	☐	1.000		1792783.60		A	2.3
4	☐	1.000		1822601.43		A	1.2
5	☐	1.000		1775707.82		A	1.5
6	☐	1.000		1749410.58		A	2.5

Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1577939.04		A	2.5
2	☐	1.000		1578283.36		A	2.3
3	☐	1.000		1632632.27		A	2.2
4	☐	1.000		1598128.00		A	1.3
5	☐	1.000		1607422.63		A	0.9
6	☐	1.000		1551430.60		A	1.6

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	015CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:22:28-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	46249	0.01
Be	9	1	No Gas	55	59.60
V	51	2	He	3320	0.09
Cr	52	2	He	9313	0.03
Fe	56	2	He	18673	0.00
Se	78	2	He	149	1.04
As	75	2	He	189	9.22
Ca	44	2	He	727	0.97
Na	23	2	He	86960	0.00
Mg	24	2	He	553	2.36
K	39	2	He	134783	0.00
Mn	55	2	He	2120	0.37
Co	59	2	He	257	2.32
Ni	60	2	He	203	3.70
Cu	63	2	He	1110	0.66
Zn	66	2	He	537	3.23
Al	27	2	He	893	0.32
B	11	1	No Gas	7274	0.01
Al	27	1	No Gas	30129	0.08
Si	28	1	No Gas	455535	0.00
Ag	107	1	No Gas	273	4.30
Cd	111	1	No Gas	3	16334.44
Sr	88	1	No Gas	960	1.60
Mo	95	1	No Gas	160	24.40
Sn	118	1	No Gas	1127	0.89
Sb	121	1	No Gas	130	35.99
Ba	137	1	No Gas	263	2.20
Tl	205	1	No Gas	1643	0.21
Tl	203	1	No Gas	767	1.36
Pb	208	1	No Gas	1037	0.91
U	238	1	No Gas	60	48.11
Ca	43	2	He	33	226.50
Sb	121	2	He	73	108.96
Ti	47	2	He	20	500.00
Cu	63	1	No Gas	2437	0.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	709619	4.86
Ge	72	2	He	445920	1.71
Ge	72	1	No Gas	1651482	2.23
In	115	1	No Gas	1818500	1.07

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1577939	2.48

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:24:25-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	6878	0.03
V	51	2	He	13013	0.01
Cr	52	2	He	20112	0.02
Fe	56	2	He	1006973	0.00
Se	78	2	He	318	1.43
As	75	2	He	1843	0.25
Ca	44	2	He	8620	0.04
Na	23	2	He	284565	0.00
Mg	24	2	He	125885	0.00
K	39	2	He	295505	0.00
Mn	55	2	He	10684	0.04
Co	59	2	He	14104	0.02
Ni	60	2	He	3551	0.15
Cu	63	2	He	9363	0.02
Zn	66	2	He	2277	0.25
Al	27	2	He	1657	0.43
B	11	1	No Gas	26659	0.01
Al	27	1	No Gas	52824	0.00
Si	28	1	No Gas	529164	0.00
Ag	107	1	No Gas	25231	0.01
Cd	111	1	No Gas	4898	0.13
Sr	88	1	No Gas	50512	0.00
Mo	95	1	No Gas	10114	0.02
Sn	118	1	No Gas	15159	0.03
Sb	121	1	No Gas	21668	0.00
Ba	137	1	No Gas	7933	0.06
Tl	205	1	No Gas	42312	0.00
Tl	203	1	No Gas	17319	0.01
Pb	208	1	No Gas	58545	0.00
U	238	1	No Gas	56588	0.00
Ca	43	2	He	473	4.81
Sb	121	2	He	9250	0.05
Cu	63	1	No Gas	21300	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697971	1.11	709619	98.36	70	120	
Ge	72	2	He	447517	0.87	445920	100.36	70	120	
Ge	72	1	No Gas	1663623	0.37	1651482	100.74	70	120	

Calibration Standard Report

In	115	1	No Gas	1798816	1.18	1818500	98.92	70	120	
Bi	209	1	No Gas	1578283	2.29	1577939	100.02	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:26:31-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16862	0.00
V	51	2	He	26877	0.00
Cr	52	2	He	35824	0.00
Fe	56	2	He	2403080	0.00
Se	78	2	He	551	1.19
As	75	2	He	3864	0.10
Ca	44	2	He	20172	0.01
Na	23	2	He	572491	0.00
Mg	24	2	He	309973	0.00
K	39	2	He	532195	0.00
Mn	55	2	He	23253	0.01
Co	59	2	He	35928	0.00
Ni	60	2	He	8890	0.03
Cu	63	2	He	21921	0.01
Zn	66	2	He	5084	0.05
Al	27	2	He	3070	0.28
B	11	1	No Gas	54547	0.00
Al	27	1	No Gas	88518	0.00
Si	28	1	No Gas	630134	0.00
Ag	107	1	No Gas	61205	0.00
Cd	111	1	No Gas	11473	0.01
Sr	88	1	No Gas	124119	0.00
Mo	95	1	No Gas	24239	0.01
Sn	118	1	No Gas	37096	0.00
Sb	121	1	No Gas	50980	0.00
Ba	137	1	No Gas	19672	0.01
Tl	205	1	No Gas	103548	0.00
Tl	203	1	No Gas	43536	0.00
Pb	208	1	No Gas	143966	0.00
U	238	1	No Gas	139307	0.00
Ca	43	2	He	1250	0.78
Sb	121	2	He	22042	0.01
Cu	63	1	No Gas	50240	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	714558	1.87	709619	100.70	70	120	
Ge	72	2	He	444959	1.97	445920	99.78	70	120	
Ge	72	1	No Gas	1646335	0.90	1651482	99.69	70	120	

Calibration Standard Report

In	115	1	No Gas	1792784	2.31	1818500	98.59	70	120	
Bi	209	1	No Gas	1632632	2.24	1577939	103.47	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	018CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:28:27-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	34617	0.00
V	51	2	He	51940	0.00
Cr	52	2	He	63829	0.00
Fe	56	2	He	4856129	0.00
Se	78	2	He	907	0.49
As	75	2	He	7762	0.04
Ca	44	2	He	40757	0.01
Na	23	2	He	1053688	0.00
Mg	24	2	He	635333	0.00
K	39	2	He	944676	0.00
Mn	55	2	He	45108	0.01
Co	59	2	He	72134	0.00
Ni	60	2	He	17989	0.00
Cu	63	2	He	44804	0.00
Zn	66	2	He	9914	0.01
Al	27	2	He	6038	0.03
B	11	1	No Gas	104042	0.00
Al	27	1	No Gas	187167	0.00
Si	28	1	No Gas	832038	0.00
Ag	107	1	No Gas	125657	0.00
Cd	111	1	No Gas	23816	0.00
Sr	88	1	No Gas	253823	0.00
Mo	95	1	No Gas	49633	0.01
Sn	118	1	No Gas	73686	0.00
Sb	121	1	No Gas	107237	0.00
Ba	137	1	No Gas	38976	0.00
Tl	205	1	No Gas	204429	0.00
Tl	203	1	No Gas	85294	0.00
Pb	208	1	No Gas	292080	0.00
U	238	1	No Gas	287860	0.00
Ca	43	2	He	2267	0.16
Sb	121	2	He	46135	0.00
Cu	63	1	No Gas	100692	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	682365	2.23	709619	96.16	70	120	
Ge	72	2	He	447283	0.12	445920	100.31	70	120	
Ge	72	1	No Gas	1638277	2.02	1651482	99.20	70	120	

Calibration Standard Report

In	115	1	No Gas	1822601	1.18	1818500	100.23	70	120	
Bi	209	1	No Gas	1598128	1.30	1577939	101.28	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	019CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:30:22-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	337044	0.00
V	51	2	He	484928	0.00
Cr	52	2	He	528528	0.00
Fe	56	2	He	46804956	0.00
Se	78	2	He	8289	0.01
As	75	2	He	76346	0.00
Ca	44	2	He	390884	0.00
Na	23	2	He	9027045	0.00
Mg	24	2	He	5739006	0.00
K	39	2	He	7757722	0.00
Mn	55	2	He	415735	0.00
Co	59	2	He	693866	0.00
Ni	60	2	He	170218	0.00
Cu	63	2	He	424314	0.00
Zn	66	2	He	91678	0.00
Al	27	2	He	43923	0.00
B	11	1	No Gas	925885	0.00
Al	27	1	No Gas	1322031	0.00
Si	28	1	No Gas	3807676	0.00
Ag	107	1	No Gas	1243848	0.00
Cd	111	1	No Gas	230458	0.00
Sr	88	1	No Gas	2510482	0.00
Mo	95	1	No Gas	493075	0.00
Sn	118	1	No Gas	717081	0.00
Sb	121	1	No Gas	1070641	0.00
Ba	137	1	No Gas	384781	0.00
Tl	205	1	No Gas	1847792	0.00
Tl	203	1	No Gas	754835	0.00
Pb	208	1	No Gas	2851971	0.00
U	238	1	No Gas	2903774	0.00
Ca	43	2	He	22332	0.01
Sb	121	2	He	450410	0.00
Cu	63	1	No Gas	951003	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	674683	3.70	709619	95.08	70	120	
Ge	72	2	He	450948	0.93	445920	101.13	70	120	
Ge	72	1	No Gas	1642361	0.97	1651482	99.45	70	120	

Calibration Standard Report

In	115	1	No Gas	1775708	1.47	1818500	97.65	70	120	
Bi	209	1	No Gas	1607423	0.88	1577939	101.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	020CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:32:32-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	673415	0.00
V	51	2	He	936266	0.00
Cr	52	2	He	1033843	0.00
Fe	56	2	He	91791482	0.00
Se	78	2	He	16140	0.01
As	75	2	He	150738	0.00
Ca	44	2	He	769485	0.00
Na	23	2	He	18022091	0.00
Mg	24	2	He	11227839	0.00
K	39	2	He	15143691	0.00
Mn	55	2	He	810623	0.00
Co	59	2	He	1382350	0.00
Ni	60	2	He	332895	0.00
Cu	63	2	He	825862	0.00
Zn	66	2	He	177933	0.00
Al	27	2	He	85103	0.00
B	11	1	No Gas	1848732	0.00
Al	27	1	No Gas	2528101	0.00
Si	28	1	No Gas	7049298	0.00
Ag	107	1	No Gas	2467271	0.00
Cd	111	1	No Gas	455494	0.00
Sr	88	1	No Gas	4878673	0.00
Mo	95	1	No Gas	992250	0.00
Sn	118	1	No Gas	1425150	0.00
Sb	121	1	No Gas	2112682	0.00
Ba	137	1	No Gas	756073	0.00
Tl	205	1	No Gas	3679638	0.00
Tl	203	1	No Gas	1553010	0.00
Pb	208	1	No Gas	5660512	0.00
U	238	1	No Gas	5699163	0.00
Ca	43	2	He	44011	0.00
Sb	121	2	He	895929	0.00
Cu	63	1	No Gas	1914836	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	647735	1.80	709619	91.28	70	120	
Ge	72	2	He	441149	0.97	445920	98.93	70	120	
Ge	72	1	No Gas	1608708	1.68	1651482	97.41	70	120	

Calibration Standard Report

In	115	1	No Gas	1749411	2.48	1818500	96.20	70	120	
Bi	209	1	No Gas	1551431	1.60	1577939	98.32	70	120	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	024LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:48:08-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.035	2.035	3.88	70325	0.00	2	
Be	9	1	No Gas	1.901	1.901	1.93	6995	0.03	2	
V	51	2	He	1.888	1.888	1.61	12727	0.01	2	
Cr	52	2	He	2.116	2.116	4.11	21053	0.01	2	
Fe	56	2	He	205.335	205.335	1.60	1009232	0.02	200	
Se	78	2	He	2.082	2.082	8.59	330	0.63	2	
As	75	2	He	2.027	2.027	5.54	1797	0.11	2	
Ca	44	2	He	207.298	207.298	4.12	9120	2.27	200	
Na	23	2	He	207.202	207.202	0.98	284787	0.07	200	
Mg	24	2	He	216.145	216.145	1.32	128139	0.17	200	
K	39	2	He	205.025	205.025	1.44	301693	0.07	200	
Mn	55	2	He	1.960	1.960	3.38	10534	0.02	2	
Co	59	2	He	1.953	1.953	2.03	14398	0.01	2	
Ni	60	2	He	1.994	1.994	11.90	3697	0.05	2	
Cu	63	2	He	1.891	1.891	2.85	9357	0.02	2	
Zn	66	2	He	2.024	2.024	12.44	2447	0.08	2	
Al	27	2	He	1.846	1.846	16.51	1747	0.11	2	
B	11	1	No Gas	13.088	13.088	2.45	33390	0.04	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.745	1.745	6.19	53630	0.00	2	
Si	28	1	No Gas	10.604	10.604	7.46	538849	0.00	10	
Ag	107	1	No Gas	1.969	1.969	0.85	25495	0.01	2	
Cd	111	1	No Gas	1.928	1.928	4.69	4565	0.04	2	
Sr	88	1	No Gas	1.981	1.981	1.43	51352	0.00	2	
Mo	95	1	No Gas	1.976	1.976	3.41	10311	0.02	2	
Sn	118	1	No Gas	1.926	1.926	1.20	15366	0.01	2	
Sb	121	1	No Gas	1.971	1.971	3.26	21935	0.01	2	
Ba	137	1	No Gas	1.975	1.975	0.83	8029	0.02	2	
Tl	205	1	No Gas	2.281	2.281	1.91	44614	0.01	2	
Tl	203	1	No Gas	2.208	2.208	4.21	18204	0.01	2	
Pb	208	1	No Gas	1.994	1.994	2.33	58829	0.00	2	
U	238	1	No Gas	1.943	1.943	2.97	56869	0.00	2	
Ca	43	2	He	191.488	191.488	6.06	477	40.17	200	
Sb	121	2	He	1.922	1.922	3.03	9093	0.02	2	
Ti	47	2	He	2.175	2.175	11.27	477	0.46	200	
Cu	63	1	No Gas	1.942	1.942	1.73	21858	0.01	2	
Se	82	1	No Gas	1.968	1.968	28.47	494	0.40	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	707814	1.50	709619	99.75	70	120	
Ge	72	2	He	463613	0.79	445920	103.97	70	120	
Ge	72	1	No Gas	1686937	0.68	1651482	102.15	70	120	
In	115	1	No Gas	1818695	0.94	1818500	100.01	70	120	
Bi	209	1	No Gas	1597842	1.85	1577939	101.26	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	025LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:50:03-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.901	4.901	3.56	102869	0.00	5	
Be	9	1	No Gas	4.747	4.747	3.07	17152	0.03	5	
V	51	2	He	4.790	4.790	1.41	26827	0.02	5	
Cr	52	2	He	4.899	4.899	5.03	35797	0.01	5	
Fe	56	2	He	508.909	508.909	1.26	2457881	0.02	500	
Se	78	2	He	4.879	4.879	8.46	561	0.87	5	
As	75	2	He	4.899	4.899	1.32	4041	0.12	5	
Ca	44	2	He	501.411	501.411	2.86	20859	2.40	500	
Na	23	2	He	521.296	521.296	2.67	575965	0.09	500	
Mg	24	2	He	531.089	531.089	2.96	312115	0.17	500	
K	39	2	He	504.765	504.765	3.27	534649	0.09	500	
Mn	55	2	He	4.924	4.924	3.11	22993	0.02	5	
Co	59	2	He	4.997	4.997	1.15	36219	0.01	5	
Ni	60	2	He	4.968	4.968	1.73	8846	0.06	5	
Cu	63	2	He	4.889	4.889	0.50	22228	0.02	5	
Zn	66	2	He	4.881	4.881	7.35	5084	0.10	5	
Al	27	2	He	4.909	4.909	4.93	3084	0.16	5	
B	11	1	No Gas	26.079	26.079	3.98	58518	0.04	25	
Al	27	1	No Gas	4.468	4.468	2.56	90219	0.00	5	
Si	28	1	No Gas	24.472	24.472	6.07	640558	0.00	25	
Ag	107	1	No Gas	4.750	4.750	1.75	62541	0.01	5	
Cd	111	1	No Gas	4.707	4.707	1.70	11410	0.04	5	
Sr	88	1	No Gas	4.785	4.785	4.54	125431	0.00	5	
Mo	95	1	No Gas	4.730	4.730	4.91	25017	0.02	5	
Sn	118	1	No Gas	4.725	4.725	2.49	36885	0.01	5	
Sb	121	1	No Gas	4.619	4.619	2.18	51679	0.01	5	
Ba	137	1	No Gas	4.834	4.834	3.22	19709	0.02	5	
Tl	205	1	No Gas	5.441	5.441	1.04	104324	0.01	5	
Tl	203	1	No Gas	5.287	5.287	0.73	42603	0.01	5	
Pb	208	1	No Gas	4.865	4.865	0.31	142359	0.00	5	
U	238	1	No Gas	4.762	4.762	2.32	139598	0.00	5	
Ca	43	2	He	561.926	561.926	4.14	1323	42.46	500	
Sb	121	2	He	4.751	4.751	4.02	22236	0.02	5	
Ti	47	2	He	5.248	5.248	10.33	1113	0.47	5	
Cu	63	1	No Gas	4.773	4.773	1.84	50537	0.01	5	
Se	82	1	No Gas	4.339	4.339	25.28	925	0.47	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	698532	2.71	709619	98.44	70	120	
Ge	72	2	He	460911	1.03	445920	103.36	70	120	
Ge	72	1	No Gas	1702324	1.59	1651482	103.08	70	120	

Sample Report

In	115	1	No Gas	1861388	3.07	1818500	102.36	70	120	
Bi	209	1	No Gas	1600878	1.40	1577939	101.45	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	026_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:51:59-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.086	73.6	46540	0.6	0.5	
Be	9	1	No Gas	0.000	3538.7	55	24.1	0.5	
V	51	2	He	-0.044	-92.6	3212	5.8	2.5	
Cr	52	2	He	0.203	20.9	10684	2.4	2.5	
Fe	56	2	He	1.832	4.7	28012	1.1	100	
Se	78	2	He	-0.168	-101.6	140	10.3	1	
As	75	2	He	0.053	28.5	237	4.9	2.5	
Ca	44	2	He	9.168	28.5	1117	9.4	100	
Na	23	2	He	-1.948	-56.0	87868	0.8	100	
Mg	24	2	He	0.737	34.1	1003	15.0	100	
K	39	2	He	-3.028	-26.7	136637	0.4	100	
Mn	55	2	He	0.093	68.5	2577	10.5	2.5	
Co	59	2	He	-0.009	-51.5	203	15.8	2.5	
Ni	60	2	He	0.062	39.6	317	13.1	2.5	
Cu	63	2	He	-0.061	-58.1	883	17.0	1	
Zn	66	2	He	0.404	35.9	927	14.6	2.5	
Al	27	2	He	4.061	8.6	2704	5.4	5	
B	11	1	No Gas	2.064	9.3	11213	2.4	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	3.546	2.8	76322	0.5	5	
Si	28	1	No Gas	1.573	122.5	470264	0.7	10	
Ag	107	1	No Gas	-0.001	-1161.9	267	45.2	2.5	
Cd	111	1	No Gas	0.001	1117.5	6	496.9	1	
Sr	88	1	No Gas	0.014	23.9	1330	7.9	2.5	
Mo	95	1	No Gas	0.009	60.2	210	12.6	2.5	
Sn	118	1	No Gas	0.071	6.8	1663	3.9	5	
Sb	121	1	No Gas	0.027	31.8	427	20.2	2.5	
Ba	137	1	No Gas	0.040	17.8	423	4.9	2.5	
Tl	205	1	No Gas	0.018	97.6	1954	14.3	1	
Tl	203	1	No Gas	-0.012	-47.3	663	4.6	1	
Pb	208	1	No Gas	0.018	3.2	1553	2.9	2.5	
U	238	1	No Gas	0.002	51.5	130	27.7	2.5	
Ca	43	2	He	-7.763	-64.8	17	69.3	100	
Sb	121	2	He	0.024	26.8	187	16.4	2.5	
Ti	47	2	He	-0.002	-4328.6	20	86.6	2.5	
Se	82	1	No Gas	-0.917	-83.5	-16	-849.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697216	1.04	709619	98.25	70	120	
Ge	72	2	He	459741	0.37	445920	103.10	70	120	
Ge	72	1	No Gas	1666051	2.06	1651482	100.88	70	120	
In	115	1	No Gas	1830694	1.79	1818500	100.67	70	120	
Bi	209	1	No Gas	1563096	2.32	1577939	99.06	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	027_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:53:56-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	98.939	4.976	1155709	2.23	100	98.9	90	110	
Be	9	1	No Gas	98.765	2.231	342416	0.45	100	98.8	90	110	
V	51	2	He	104.420	0.847	506660	0.54	100	104.4	90	110	
Cr	52	2	He	103.365	0.501	554639	0.43	100	103.4	90	110	
Fe	56	2	He	10242.189	1.258	48455689	1.62	10000	102.4	90	110	
Se	78	2	He	101.591	2.935	8519	2.40	100	101.6	90	110	
As	75	2	He	100.948	0.534	78380	0.82	100	100.9	90	110	
Ca	44	2	He	10110.721	1.122	400905	1.00	10000	101.1	90	110	
Na	23	2	He	10291.536	1.597	9559538	1.88	10000	102.9	90	110	
Mg	24	2	He	10256.839	0.633	5939280	1.15	10000	102.6	90	110	
K	39	2	He	10331.162	1.867	8122497	1.44	10000	103.3	90	110	
Mn	55	2	He	103.497	0.736	433681	1.01	100	103.5	90	110	
Co	59	2	He	101.798	0.627	722978	0.40	100	101.8	90	110	
Ni	60	2	He	103.986	0.106	178574	0.54	100	104.0	90	110	
Cu	63	2	He	102.750	0.438	438362	0.32	100	102.7	90	110	
Zn	66	2	He	103.550	0.418	95360	0.91	100	103.6	90	110	
Al	27	2	He	102.663	1.860	45498	1.32	100	102.7	90	110	
B	11	1	No Gas	496.163	4.225	947084	1.71	500	99.2	90	110	
Al	27	1	No Gas	102.216	3.326	1338363	1.96	100	102.2	90	110	
Si	28	1	No Gas	502.561	4.856	3841012	1.64	500	100.5	90	110	
Ag	107	1	No Gas	99.891	1.196	1252704	1.63	100	99.9	90	110	
Cd	111	1	No Gas	101.842	0.702	235944	1.71	100	101.8	90	110	
Sr	88	1	No Gas	101.617	3.017	2530109	1.14	100	101.6	90	110	
Mo	95	1	No Gas	99.568	2.369	500845	1.18	100	99.6	90	110	
Sn	118	1	No Gas	100.176	1.190	725844	1.55	100	100.2	90	110	
Sb	121	1	No Gas	102.834	4.233	1107788	1.90	100	102.8	90	110	
Ba	137	1	No Gas	101.687	1.433	391534	0.76	100	101.7	90	110	
Tl	205	1	No Gas	102.484	0.791	1872681	1.04	100	102.5	90	110	
Tl	203	1	No Gas	99.711	1.220	764091	0.80	100	99.7	90	110	
Pb	208	1	No Gas	101.172	1.518	2844193	0.21	100	101.2	90	110	
U	238	1	No Gas	101.791	1.682	2886906	0.24	100	101.8	90	110	
Ca	43	2	He	10626.387	1.938	24088	1.65	10000	106.3	90	110	
Sb	121	2	He	101.106	0.954	465487	0.62	100	101.1	90	110	
Ti	47	2	He	100.463	1.011	20676	1.52	100	100.5	90	110	
Cu	63	1	No Gas	101.318	3.036	986472	1.50	100	101.3	90	110	
Se	82	1	No Gas	99.473	3.297	17326	0.66	100	99.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672262	2.57	709619	94.74	70	120	
Ge	72	2	He	454836	0.52	445920	102.00	70	120	
Ge	72	1	No Gas	1643832	2.71	1651482	99.54	70	120	
In	115	1	No Gas	1780231	2.18	1818500	97.90	70	120	
Bi	209	1	No Gas	1549310	1.44	1577939	98.19	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	029ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:59:47-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.250	31.2	48630	1.2	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.010	-34.9	18	68.6	0	ICSA Main CR1 Failed
V	51	2	He	0.157	14.3	3967	2.8	0	ICSA Main CR1 Failed
Cr	52	2	He	1.790	4.3	18126	1.9	0	ICSA Main CR1 Failed
Fe	56	2	He	100158.452	0.6	453357273	0.4	0	
Se	78	2	He	-0.090	-483.3	139	24.6	0	ICSA Main CR1 Failed
As	75	2	He	0.274	17.3	388	9.1	0	ICSA Main CR1 Failed
Ca	44	2	He	94155.720	0.9	3567544	1.1	0	
Na	23	2	He	99784.884	1.1	87971472	0.9	0	
Mg	24	2	He	98960.909	1.1	54840354	0.9	0	
K	39	2	He	99609.652	2.0	73821497	1.8	0	
Mn	55	2	He	0.879	3.6	5578	2.1	0	ICSA Main CR1 Failed
Co	59	2	He	0.420	2.5	3104	2.5	0	ICSA Main CR1 Failed
Ni	60	2	He	0.973	1.7	1797	1.7	0	ICSA Main CR1 Failed
Cu	63	2	He	0.306	13.3	2330	6.9	0	ICSA Main CR1 Failed
Zn	66	2	He	2.978	4.0	3134	3.5	0	ICSA Main CR1 Failed
Al	27	2	He	93533.846	1.6	38883069	1.4	0	
B	11	1	No Gas	3.756	5.6	14598	3.2	0	
Al	27	1	No Gas	96485.263	1.3	1180128142	1.3	0	
Si	28	1	No Gas	26.196	1.6	601931	0.6	0	
Ag	107	1	No Gas	0.175	8.6	2310	7.2	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.334	49.5	729	49.5	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.647	3.0	109361	2.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2006.031	1.4	9460754	0.7	0	
Sn	118	1	No Gas	0.063	41.2	1463	11.3	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.273	2.5	2937	1.9	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.704	9.9	2780	8.4	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.070	19.8	2584	9.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.071	23.1	1160	10.8	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.217	12.4	6374	9.1	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.011	17.2	340	16.4	0	ICSA Main CR1 Failed
Ca	43	2	He	101066.687	0.4	219009	0.5	0	
Sb	121	2	He	0.246	12.2	1157	11.3	0	ICSA Main CR1 Failed
Ti	47	2	He	2106.105	0.7	414459	0.5	0	
Se	82	1	No Gas	-0.251	-245.7	94	108.5	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	699816	0.79	709619	98.62	70	120	
Ge	72	2	He	435335	0.22	445920	97.63	70	120	
Ge	72	1	No Gas	1569898	0.52	1651482	95.06	70	120	
In	115	1	No Gas	1669215	0.81	1818500	91.79	70	120	
Bi	209	1	No Gas	1386557	1.95	1577939	87.87	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	030ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:01:46-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	94.544	5.367	1044548	3.51	100	94.5	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	94.735	3.060	310019	0.27	100	94.7	80	120	
V	51	2	He	101.388	1.929	464613	0.89	100	101.4	80	120	
Cr	52	2	He	101.536	1.685	514616	0.91	100	101.5	80	120	
Fe	56	2	He	111288.044	1.736	496950006	0.59	100	111288.0	80	120	
Se	78	2	He	103.281	3.517	8175	2.17	100	103.3	80	120	
As	75	2	He	106.067	1.345	77756	0.46	100	106.1	80	120	
Ca	44	2	He	104841.108	2.405	3918922	2.05	100	104841.1	80	120	
Na	23	2	He	110302.144	2.543	95922832	1.63	100	110302.1	80	120	
Mg	24	2	He	110237.633	1.489	60268536	0.41	100	110237.6	80	120	
K	39	2	He	110362.082	1.557	80677149	0.31	100	110362.1	80	120	
Mn	55	2	He	102.285	2.516	404698	1.38	100	102.3	80	120	
Co	59	2	He	98.363	1.894	659630	0.60	100	98.4	80	120	
Ni	60	2	He	98.673	2.609	160002	1.64	100	98.7	80	120	
Cu	63	2	He	99.725	1.440	401787	0.89	100	99.7	80	120	
Zn	66	2	He	99.803	0.945	86807	0.47	100	99.8	80	120	
Al	27	2	He	94698.952	2.368	38835519	1.07	100	94699.0	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	480.115	1.191	865962	2.62	100	480.1	80	120	
Al	27	1	No Gas	93989.740	4.434	1175979796	1.05	100	93989.7	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	502.209	4.663	3753210	0.63	100	502.2	80	120	
Ag	107	1	No Gas	96.539	2.374	1125147	2.63	100	96.5	80	120	
Cd	111	1	No Gas	100.532	1.721	216417	0.41	100	100.5	80	120	
Sr	88	1	No Gas	110.174	3.140	2549389	1.84	100	110.2	80	120	
Mo	95	1	No Gas	2121.994	2.045	9917214	0.89	100	2122.0	80	120	
Sn	118	1	No Gas	101.257	1.409	681764	0.41	100	101.3	80	120	
Sb	121	1	No Gas	96.362	3.611	1015123	1.37	100	96.4	80	120	
Ba	137	1	No Gas	101.311	1.805	362508	0.57	100	101.3	80	120	
Tl	205	1	No Gas	104.207	3.475	1739386	3.76	100	104.2	80	120	
Tl	203	1	No Gas	99.945	2.999	699554	2.71	100	99.9	80	120	
Pb	208	1	No Gas	99.120	1.277	2545335	0.43	100	99.1	80	120	
U	238	1	No Gas	105.802	2.423	2740954	2.06	100	105.8	80	120	
Ca	43	2	He	110728.170	1.910	236705	0.70	100	110728.2	80	120	
Sb	121	2	He	98.802	2.176	429508	0.90	100	98.8	80	120	
Ti	47	2	He	2212.589	1.674	429556	0.61	100	2212.6	80	120	
Cu	63	1	No Gas	95.049	3.503	904866	0.64	100	95.0	80	120	
Se	82	1	No Gas	100.414	5.551	17092	2.76	100	100.4	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	634672	2.84	709619	89.44	70	120	
Ge	72	2	He	429534	1.32	445920	96.33	70	120	
Ge	72	1	No Gas	1607595	3.61	1651482	97.34	70	120	
In	115	1	No Gas	1654294	1.33	1818500	90.97	70	120	
Bi	209	1	No Gas	1415162	1.41	1577939	89.68	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	033_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:09:03-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
n	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.803	2.897	1078503	2.75	100	98.8	90	110	
Be	9	1	No Gas	95.770	1.906	310095	0.62	100	95.8	90	110	
V	51	2	He	100.746	0.756	494004	0.87	100	100.7	90	110	
Cr	52	2	He	100.041	0.829	542655	1.09	100	100.0	90	110	
Fe	56	2	He	10066.624	1.748	48113148	1.37	10000	100.7	90	110	
Se	78	2	He	100.109	2.708	8483	2.22	100	100.1	90	110	
As	75	2	He	98.880	1.558	77568	1.29	100	98.9	90	110	
Ca	44	2	He	9827.640	0.713	393724	0.74	10000	98.3	90	110	
Na	23	2	He	9944.950	1.277	9335528	1.18	10000	99.4	90	110	
Mg	24	2	He	9972.691	0.843	5834149	0.85	10000	99.7	90	110	
K	39	2	He	10046.480	1.191	7984306	1.13	10000	100.5	90	110	
Mn	55	2	He	99.798	1.215	422552	0.68	100	99.8	90	110	
Co	59	2	He	98.790	0.487	708870	0.51	100	98.8	90	110	
Ni	60	2	He	100.907	0.517	175083	1.06	100	100.9	90	110	
Cu	63	2	He	100.637	1.269	433796	1.06	100	100.6	90	110	
Zn	66	2	He	100.453	1.101	93474	0.65	100	100.5	90	110	
Al	27	2	He	97.424	1.874	43669	1.32	100	97.4	90	110	
B	11	1	No Gas	495.566	0.808	883913	1.72	500	99.1	90	110	
Al	27	1	No Gas	95.347	2.888	1262016	2.79	100	95.3	90	110	
Si	28	1	No Gas	468.031	1.800	3642621	0.89	5000	9.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.066	2.025	1260936	1.49	100	99.1	90	110	
Cd	111	1	No Gas	99.324	1.605	233543	0.94	100	99.3	90	110	
Sr	88	1	No Gas	102.388	1.691	2588194	1.11	100	102.4	90	110	
Mo	95	1	No Gas	97.053	0.915	495608	0.35	100	97.1	90	110	
Sn	118	1	No Gas	99.757	0.772	733662	0.57	100	99.8	90	110	
Sb	121	1	No Gas	98.446	2.084	1070555	1.39	100	98.4	90	110	
Ba	137	1	No Gas	99.160	1.098	387572	0.86	100	99.2	90	110	
Tl	205	1	No Gas	105.202	1.874	1930416	1.12	100	105.2	90	110	
Tl	203	1	No Gas	99.678	1.440	767112	0.63	100	99.7	90	110	
Pb	208	1	No Gas	99.894	1.455	2820595	1.52	100	99.9	90	110	
U	238	1	No Gas	103.679	1.240	2953315	0.95	100	103.7	90	110	
Ca	43	2	He	10265.461	2.041	23510	1.51	10000	102.7	90	110	
Sb	121	2	He	97.717	0.819	454529	0.54	100	97.7	90	110	
Ti	47	2	He	100.502	1.157	20896	1.07	100	100.5	90	110	
Cu	63	1	No Gas	97.529	0.450	958519	1.08	100	97.5	90	110	
Se	82	1	No Gas	101.774	0.493	17890	0.42	100	101.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627795	2.37	709619	88.47	70	120	
Ge	72	2	He	459528	0.54	445920	103.05	70	120	
Ge	72	1	No Gas	1658341	0.82	1651482	100.42	70	120	
In	115	1	No Gas	1806789	0.80	1818500	99.36	70	120	
Bi	209	1	No Gas	1555910	0.85	1577939	98.60	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	034_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:10:55-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.023	-264.1	44982	1.3	0.5	
Be	9	1	No Gas	-0.001	-481.4	52	24.4	0.5	
V	51	2	He	0.018	26.3	3444	1.1	2.5	
Cr	52	2	He	0.198	9.4	10441	0.4	2.5	
Fe	56	2	He	1.576	18.7	26253	5.3	100	
Se	78	2	He	-0.035	-520.8	148	10.2	2	
As	75	2	He	0.038	95.3	220	12.9	2.5	
Ca	44	2	He	4.984	34.1	930	6.7	100	
Na	23	2	He	-16.130	-2.7	73181	1.0	100	
Mg	24	2	He	1.203	12.5	1250	7.3	100	
K	39	2	He	-2.330	-104.2	134426	1.3	100	
Mn	55	2	He	-0.065	-15.8	1873	2.2	2.5	
Co	59	2	He	-0.002	-368.7	243	24.8	2.5	
Ni	60	2	He	0.006	357.8	217	18.7	2.5	
Cu	63	2	He	-0.064	-12.6	850	4.2	2	
Zn	66	2	He	0.164	15.2	690	2.9	2.5	
Al	27	2	He	0.598	52.0	1160	12.0	5	
B	11	1	No Gas	5.545	10.9	17933	5.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	0.199	100.1	33179	6.1	5	
Si	28	1	No Gas	-5.323	-28.1	427125	0.4	10	
Ag	107	1	No Gas	0.013	21.5	447	9.0	2.5	
Cd	111	1	No Gas	0.004	58.7	13	45.8	1	
Sr	88	1	No Gas	-0.003	-8.8	880	0.0	2.5	
Mo	95	1	No Gas	0.136	13.5	867	11.3	2.5	
Sn	118	1	No Gas	0.085	28.2	1767	9.4	5	
Sb	121	1	No Gas	0.080	18.1	1010	14.7	2.5	
Ba	137	1	No Gas	-0.013	-55.6	213	14.3	2.5	
Tl	205	1	No Gas	1.105	36.8	22105	33.2	1	CCB Main CR1 Failed
Tl	203	1	No Gas	1.083	37.0	9177	33.1	1	CCB Main CR1 Failed
Pb	208	1	No Gas	0.025	33.3	1750	13.3	2.5	
U	238	1	No Gas	0.022	17.2	700	14.9	2.5	
Ca	43	2	He	2.798	3.1	40	0.0	100	
Sb	121	2	He	0.058	26.6	340	20.6	2.5	
Ti	47	2	He	-0.033	-173.8	13	86.6	2.5	
Cu	63	1	No Gas	-0.050	-30.5	1984	5.1	2.5	
Se	82	1	No Gas	-0.812	-10.7	1	1204.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	692881	2.79	709619	97.64	70	120	
Ge	72	2	He	450508	0.49	445920	101.03	70	120	
Ge	72	1	No Gas	1681895	2.82	1651482	101.84	70	120	
In	115	1	No Gas	1832100	0.87	1818500	100.75	70	120	
Bi	209	1	No Gas	1575040	0.96	1577939	99.82	70	120	

Sample Report

Sample Table

Sample Name	MBLK-198597
Data File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:13:48-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.057	-0.057	-72.94	45774	0.00	2000	
Be	9	1	No Gas	-0.004	-0.004	-50.63	42	-0.01	2000	
V	51	2	He	0.178	0.178	12.30	4308	0.00	2000	
Cr	52	2	He	0.634	0.634	2.29	13036	0.00	2000	
Fe	56	2	He	2.209	2.209	11.79	29944	0.01	200000	
Se	78	2	He	-0.103	-0.103	-170.02	146	-0.07	2000	
As	75	2	He	0.059	0.059	84.65	242	0.02	2000	
Ca	44	2	He	22.231	22.231	5.76	1647	1.35	200000	
Na	23	2	He	-7.916	-7.916	-4.79	82690	-0.01	200000	
Mg	24	2	He	12.744	12.744	2.75	8066	0.16	200000	
K	39	2	He	-3.620	-3.620	-52.96	136799	0.00	200000	
Mn	55	2	He	-0.013	-0.013	-80.01	2140	0.00	2000	
Co	59	2	He	-0.024	-0.024	-9.75	90	-0.03	2000	
Ni	60	2	He	0.036	0.036	8.95	273	0.01	2000	
Cu	63	2	He	0.079	0.079	41.75	1490	0.01	2000	
Zn	66	2	He	1.244	1.244	27.93	1710	0.07	2000	
Al	27	2	He	5.894	5.894	6.62	3524	0.17	2000	
B	11	1	No Gas	2.621	2.621	7.11	12556	0.02	2000	
Al	27	1	No Gas	6.895	6.895	42.19	121517	0.01	2000	
Si	28	1	No Gas	87.456	87.456	4.17	1076459	0.01	2000	
Ag	107	1	No Gas	0.037	0.037	14.17	760	0.00	2000	
Cd	111	1	No Gas	0.001	0.001	184.00	6	0.02	2000	
Sr	88	1	No Gas	0.037	0.037	11.53	1950	0.00	2000	
Mo	95	1	No Gas	0.114	0.114	64.88	760	0.01	2000	
Sn	118	1	No Gas	0.002	0.002	379.47	1167	0.00	2000	
Sb	121	1	No Gas	0.027	0.027	32.50	437	0.01	2000	
Ba	137	1	No Gas	0.062	0.062	26.31	517	0.01	2000	
Tl	205	1	No Gas	0.035	0.035	46.60	2464	0.00	2000	
Tl	203	1	No Gas	0.022	0.022	136.63	1010	0.00	2000	
Pb	208	1	No Gas	0.037	0.037	14.24	2263	0.00	2000	
U	238	1	No Gas	0.003	0.003	13.24	153	0.00	2000	
Ca	43	2	He	15.420	15.420	28.53	70	22.03	200000	
Sb	121	2	He	0.023	0.023	14.25	183	0.01	2000	
Ti	47	2	He	0.078	0.078	189.88	37	0.21	2000	
Cu	63	1	No Gas	0.102	0.102	5.32	3531	0.00	2000	
Zn	66	1	No Gas	1.325	1.325	1.70	5164	0.03	2000	
Se	82	1	No Gas	-0.034	-0.034	-1976.81	138	-0.02	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711410	2.77	709619	100.25	70	120	
Ge	72	2	He	461821	0.75	445920	103.57	70	120	

Sample Report

Ge	72	1	No Gas	1696033	1.89	1651482	102.70	70	120	
In	115	1	No Gas	1856925	1.63	1818500	102.11	70	120	
Bi	209	1	No Gas	1695954	2.51	1577939	107.48	70	120	

Sample Report

Sample Table

Sample Name	LCS-198597
Data File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:15:46-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	92.089	92.089	4.30	1034325	0.01	2000	
Be	9	1	No Gas	50.679	50.679	1.66	168478	0.03	2000	
V	51	2	He	52.165	52.165	0.91	258290	0.02	2000	
Cr	52	2	He	51.850	51.850	1.79	286801	0.02	2000	
Fe	56	2	He	5288.161	5288.161	0.95	25369666	0.02	200000	
Se	78	2	He	51.305	51.305	2.52	4437	1.16	2000	
As	75	2	He	52.588	52.588	2.74	41479	0.13	2000	
Ca	44	2	He	5205.632	5205.632	1.15	209595	2.48	200000	
Na	23	2	He	5183.055	5183.055	0.96	4924841	0.11	200000	
Mg	24	2	He	5257.658	5257.658	2.26	3086023	0.17	200000	
K	39	2	He	5142.472	5142.472	1.07	4168472	0.12	200000	
Mn	55	2	He	52.796	52.796	2.31	225308	0.02	2000	
Co	59	2	He	51.843	51.843	2.33	373332	0.01	2000	
Ni	60	2	He	52.644	52.644	1.47	91741	0.06	2000	
Cu	63	2	He	53.875	53.875	2.89	233508	0.02	2000	
Zn	66	2	He	55.275	55.275	3.37	51849	0.11	2000	
Al	27	2	He	96.224	96.224	2.94	43284	0.22	2000	
B	11	1	No Gas	452.474	452.474	3.98	828577	0.05	2000	
Al	27	1	No Gas	96.322	96.322	2.36	1293711	0.01	2000	
Si	28	1	No Gas	508.199	508.199	2.48	3974850	0.01	2000	
Ag	107	1	No Gas	52.043	52.043	1.66	654308	0.01	2000	
Cd	111	1	No Gas	54.352	54.352	0.64	126213	0.04	2000	
Sr	88	1	No Gas	95.285	95.285	1.03	2378771	0.00	2000	
Mo	95	1	No Gas	51.745	51.745	0.98	261017	0.02	2000	
Sn	118	1	No Gas	93.847	93.847	1.97	681642	0.01	2000	
Sb	121	1	No Gas	51.190	51.190	0.86	565146	0.01	2000	
Ba	137	1	No Gas	53.361	53.361	1.65	206076	0.03	2000	
Tl	205	1	No Gas	47.442	47.442	0.34	884385	0.01	2000	
Tl	203	1	No Gas	47.035	47.035	1.47	367743	0.01	2000	
Pb	208	1	No Gas	52.459	52.459	0.23	1503582	0.00	2000	
U	238	1	No Gas	92.039	92.039	2.09	2660415	0.00	2000	
Ca	43	2	He	5716.837	5716.837	1.81	13153	43.46	200000	
Sb	121	2	He	51.310	51.310	1.27	239492	0.02	2000	
Ti	47	2	He	129.374	129.374	3.30	26980	0.48	2000	
Cu	63	1	No Gas	52.466	52.466	1.23	524535	0.01	2000	
Zn	66	1	No Gas	54.269	54.269	0.57	149733	0.04	2000	
Se	82	1	No Gas	50.852	50.852	2.15	9144	0.56	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	644479	2.70	709619	90.82	70	120	
Ge	72	2	He	461067	0.80	445920	103.40	70	120	
Ge	72	1	No Gas	1683386	1.63	1651482	101.93	70	120	
In	115	1	No Gas	1784271	0.74	1818500	98.12	70	120	

Sample Report

Bi	209	1	No Gas	1578874	0.58	1577939	100.06	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02SD
Data File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:19:36-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.460	4.460	4.96	96137	0.00	2000	
Be	9	1	No Gas	0.010	0.010	8.94	90	0.01	2000	
V	51	2	He	0.561	0.561	1.74	6135	0.01	2000	
Cr	52	2	He	0.397	0.397	10.96	11672	0.00	2000	
Fe	56	2	He	2018.996	2018.996	1.05	9633314	0.02	200000	
Se	78	2	He	-0.146	-0.146	-235.10	141	-0.10	2000	
As	75	2	He	5.186	5.186	2.28	4238	0.12	2000	
Ca	44	2	He	17468.233	17468.233	0.90	696913	2.51	200000	
Na	23	2	He	62460.384	62460.384	2.72	57963566	0.11	200000	
Mg	24	2	He	14382.766	14382.766	0.69	8385121	0.17	200000	
K	39	2	He	379.912	379.912	1.13	434136	0.09	200000	
Mn	55	2	He	139.633	139.633	1.42	588407	0.02	2000	
Co	59	2	He	0.043	0.043	10.02	570	0.01	2000	
Ni	60	2	He	0.367	0.367	11.92	843	0.04	2000	
Cu	63	2	He	0.006	0.006	471.98	1167	0.00	2000	
Zn	66	2	He	0.809	0.809	15.70	1297	0.06	2000	
Al	27	2	He	4.753	4.753	11.63	2997	0.16	2000	
B	11	1	No Gas	102.871	102.871	2.55	206383	0.05	2000	
Al	27	1	No Gas	4.224	4.224	1.35	85083	0.00	2000	
Si	28	1	No Gas	2329.455	2329.455	2.24	16372805	0.01	2000	>LDR
Ag	107	1	No Gas	0.018	0.018	17.78	493	0.00	2000	
Cd	111	1	No Gas	-0.015	-0.015	-127.97	-30	0.05	2000	
Sr	88	1	No Gas	135.942	135.942	1.89	3366771	0.00	2000	
Mo	95	1	No Gas	0.170	0.170	12.03	1007	0.02	2000	
Sn	118	1	No Gas	0.790	0.790	7.00	6789	0.01	2000	
Sb	121	1	No Gas	0.114	0.114	7.10	1380	0.01	2000	
Ba	137	1	No Gas	44.344	44.344	2.27	169951	0.03	2000	
Tl	205	1	No Gas	0.095	0.095	19.39	3294	0.00	2000	
Tl	203	1	No Gas	0.067	0.067	45.87	1247	0.01	2000	
Pb	208	1	No Gas	0.179	0.179	1.27	5941	0.00	2000	
U	238	1	No Gas	0.032	0.032	8.03	953	0.00	2000	
Ca	43	2	He	18064.956	18064.956	1.10	41212	43.83	200000	
Sb	121	2	He	0.106	0.106	12.34	567	0.02	2000	
Ti	47	2	He	0.304	0.304	39.15	83	0.36	2000	
Cu	63	1	No Gas	0.338	0.338	8.77	5791	0.01	2000	
Zn	66	1	No Gas	0.781	0.781	8.28	3601	0.02	2000	
Se	82	1	No Gas	-0.263	-0.263	-161.75	98	-0.27	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	687147	1.97	709619	96.83	70	120	
Ge	72	2	He	457971	0.73	445920	102.70	70	120	
Ge	72	1	No Gas	1664932	1.46	1651482	100.81	70	120	
In	115	1	No Gas	1770588	1.80	1818500	97.37	70	120	

Sample Report

Bi	209	1	No Gas	1522855	0.71	1577939	96.51	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MS
Data File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:21:35-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	107.763	107.763	5.81	1280236	0.01	2000	
Be	9	1	No Gas	44.767	44.767	4.35	158340	0.03	2000	
V	51	2	He	50.640	50.640	0.47	246261	0.02	2000	
Cr	52	2	He	48.295	48.295	1.42	262912	0.02	2000	
Fe	56	2	He	14595.958	14595.958	1.50	68707422	0.02	200000	
Se	78	2	He	47.589	47.589	0.27	4052	1.17	2000	
As	75	2	He	73.789	73.789	1.53	57064	0.13	2000	
Ca	44	2	He	88000.684	88000.684	0.40	3466776	2.54	200000	
Na	23	2	He	306871.544	306871.544	0.79	281108222	0.11	200000	>LDR
Mg	24	2	He	74509.211	74509.211	0.45	42929928	0.17	200000	
K	39	2	He	6707.421	6707.421	1.14	5295945	0.13	200000	
Mn	55	2	He	711.575	711.575	0.52	2954505	0.02	2000	
Co	59	2	He	46.407	46.407	0.39	328129	0.01	2000	
Ni	60	2	He	48.565	48.565	1.02	83103	0.06	2000	
Cu	63	2	He	47.240	47.240	0.99	201169	0.02	2000	
Zn	66	2	He	49.567	49.567	2.85	45707	0.11	2000	
Al	27	2	He	103.920	103.920	0.67	45823	0.23	2000	
B	11	1	No Gas	914.842	914.842	3.11	1776295	0.05	2000	
Al	27	1	No Gas	106.707	106.707	3.77	1401162	0.01	2000	
Si	28	1	No Gas	12134.961	12134.961	3.30	82596677	0.01	2000	>LDR
Ag	107	1	No Gas	45.454	45.454	4.13	549536	0.01	2000	
Cd	111	1	No Gas	48.923	48.923	2.20	109263	0.04	2000	
Sr	88	1	No Gas	770.679	770.679	2.62	18496783	0.00	2000	
Mo	95	1	No Gas	48.463	48.463	2.14	235142	0.02	2000	
Sn	118	1	No Gas	96.129	96.129	2.21	671510	0.01	2000	
Sb	121	1	No Gas	45.934	45.934	2.29	496978	0.01	2000	
Ba	137	1	No Gas	269.408	269.408	3.20	999588	0.03	2000	
Tl	205	1	No Gas	51.743	51.743	3.02	891298	0.01	2000	
Tl	203	1	No Gas	50.839	50.839	2.46	367315	0.01	2000	
Pb	208	1	No Gas	48.016	48.016	1.81	1272095	0.00	2000	
U	238	1	No Gas	100.012	100.012	2.36	2671963	0.00	2000	
Ca	43	2	He	94815.514	94815.514	1.34	213617	44.39	200000	
Sb	121	2	He	46.164	46.164	1.37	211542	0.02	2000	
Ti	47	2	He	150.859	150.859	0.24	30885	0.49	2000	
Cu	63	1	No Gas	48.675	48.675	2.89	477010	0.01	2000	
Zn	66	1	No Gas	49.641	49.641	3.47	134327	0.04	2000	
Se	82	1	No Gas	49.278	49.278	4.65	8690	0.57	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	686073	3.20	709619	96.68	70	120	
Ge	72	2	He	452622	0.42	445920	101.50	70	120	
Ge	72	1	No Gas	1649871	1.50	1651482	99.90	70	120	
In	115	1	No Gas	1716591	2.43	1818500	94.40	70	120	
Bi	209	1	No Gas	1459516	1.33	1577939	92.50	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MSD
Data File Name	040SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:23:30-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	110.296	110.296	3.75	1363881	0.01	2000	
Be	9	1	No Gas	45.773	45.773	2.36	168644	0.03	2000	
V	51	2	He	54.570	54.570	1.63	264720	0.02	2000	
Cr	52	2	He	51.678	51.678	1.21	280263	0.02	2000	
Fe	56	2	He	15293.029	15293.029	0.73	71891154	0.02	200000	
Se	78	2	He	51.116	51.116	0.84	4335	1.18	2000	
As	75	2	He	78.850	78.850	1.15	60884	0.13	2000	
Ca	44	2	He	92537.305	92537.305	1.83	3639926	2.54	200000	
Na	23	2	He	330902.159	330902.159	0.69	302684675	0.11	200000	>LDR
Mg	24	2	He	81263.198	81263.198	2.52	46748416	0.17	200000	
K	39	2	He	7109.842	7109.842	0.66	5597645	0.13	200000	
Mn	55	2	He	750.271	750.271	0.86	3110982	0.02	2000	
Co	59	2	He	48.638	48.638	0.70	343406	0.01	2000	
Ni	60	2	He	52.419	52.419	0.35	89557	0.06	2000	
Cu	63	2	He	49.888	49.888	1.34	212088	0.02	2000	
Zn	66	2	He	50.946	50.946	2.59	46898	0.11	2000	
Al	27	2	He	110.833	110.833	1.58	48739	0.23	2000	
B	11	1	No Gas	926.688	926.688	3.26	1873488	0.05	2000	
Al	27	1	No Gas	109.385	109.385	0.58	1447203	0.01	2000	
Si	28	1	No Gas	12642.917	12642.917	1.07	86728209	0.01	2000	>LDR
Ag	107	1	No Gas	47.472	47.472	0.05	575451	0.01	2000	
Cd	111	1	No Gas	50.821	50.821	0.92	113780	0.04	2000	
Sr	88	1	No Gas	806.296	806.296	1.49	19399548	0.00	2000	
Mo	95	1	No Gas	51.143	51.143	1.36	248725	0.02	2000	
Sn	118	1	No Gas	104.000	104.000	0.47	728173	0.01	2000	
Sb	121	1	No Gas	48.294	48.294	1.77	526645	0.01	2000	
Ba	137	1	No Gas	284.288	284.288	0.76	1057462	0.03	2000	
Tl	205	1	No Gas	56.390	56.390	2.02	948125	0.01	2000	
Tl	203	1	No Gas	55.827	55.827	1.62	393707	0.01	2000	
Pb	208	1	No Gas	51.399	51.399	1.29	1329363	0.00	2000	
U	238	1	No Gas	106.481	106.481	0.92	2777544	0.00	2000	
Ca	43	2	He	99466.331	99466.331	1.84	223764	44.45	200000	
Sb	121	2	He	49.053	49.053	1.77	224452	0.02	2000	
Ti	47	2	He	160.978	160.978	0.80	32910	0.49	2000	
Cu	63	1	No Gas	50.702	50.702	0.88	500784	0.01	2000	
Zn	66	1	No Gas	51.608	51.608	1.34	140709	0.04	2000	
Se	82	1	No Gas	51.240	51.240	3.55	9101	0.56	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	714292	2.49	709619	100.66	70	120	
Ge	72	2	He	452003	1.23	445920	101.36	70	120	
Ge	72	1	No Gas	1662696	0.59	1651482	100.68	70	120	
In	115	1	No Gas	1720171	0.50	1818500	94.59	70	120	
Bi	209	1	No Gas	1424923	2.24	1577939	90.30	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02PDS
Data File Name	041SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:25:25-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	18.480	18.480	2.16	275374	0.01	2000	
Be	9	1	No Gas	90.721	90.721	3.04	344111	0.03	2000	
V	51	2	He	106.807	106.807	0.55	517004	0.02	2000	
Cr	52	2	He	102.427	102.427	0.40	548446	0.02	2000	
Fe	56	2	He	20109.411	20109.411	0.54	94901302	0.02	200000	
Se	78	2	He	102.125	102.125	0.74	8544	1.20	2000	
As	75	2	He	129.719	129.719	0.84	100436	0.13	2000	
Ca	44	2	He	92983.959	92983.959	1.51	3672673	2.53	200000	
Na	23	2	He	312349.936	312349.936	1.41	286876076	0.11	200000	>LDR
Mg	24	2	He	80956.486	80956.486	1.46	46765744	0.17	200000	
K	39	2	He	12422.152	12422.152	0.61	9716929	0.13	200000	
Mn	55	2	He	761.953	761.953	0.56	3171772	0.02	2000	
Co	59	2	He	100.600	100.600	0.30	712862	0.01	2000	
Ni	60	2	He	103.002	103.002	0.52	176483	0.06	2000	
Cu	63	2	He	101.790	101.790	1.28	433298	0.02	2000	
Zn	66	2	He	105.612	105.612	1.05	97026	0.11	2000	
Al	27	2	He	112.832	112.832	1.80	49803	0.23	2000	
B	11	1	No Gas	447.889	447.889	2.94	936398	0.05	2000	
Al	27	1	No Gas	112.290	112.290	2.02	1489494	0.01	2000	
Si	28	1	No Gas	11523.296	11523.296	1.59	79341934	0.01	2000	>LDR
Ag	107	1	No Gas	78.565	78.565	1.16	979505	0.01	2000	
Cd	111	1	No Gas	100.328	100.328	0.10	231063	0.04	2000	
Sr	88	1	No Gas	639.954	639.954	2.47	15838931	0.00	2000	
Mo	95	1	No Gas	99.551	99.551	2.38	497880	0.02	2000	
Sn	118	1	No Gas	0.219	0.219	23.30	2670	0.01	2000	
Sb	121	1	No Gas	96.562	96.562	2.93	1056101	0.01	2000	
Ba	137	1	No Gas	310.800	310.800	3.60	1189144	0.03	2000	
Tl	205	1	No Gas	115.072	115.072	0.38	1971094	0.01	2000	
Tl	203	1	No Gas	110.382	110.382	1.04	792864	0.01	2000	
Pb	208	1	No Gas	101.865	101.865	2.03	2684723	0.00	2000	
U	238	1	No Gas	0.173	0.173	1.84	4664	0.00	2000	
Ca	43	2	He	98555.715	98555.715	0.12	222628	44.27	200000	
Sb	121	2	He	97.346	97.346	1.63	447169	0.02	2000	
Ti	47	2	He	104.204	104.204	3.52	21397	0.49	2000	
Cu	63	1	No Gas	101.800	101.800	0.97	1006479	0.01	2000	
Zn	66	1	No Gas	103.362	103.362	1.33	281242	0.04	2000	
Se	82	1	No Gas	105.357	105.357	2.45	18621	0.57	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	735480	1.86	709619	103.64	70	120	
Ge	72	2	He	453804	0.27	445920	101.77	70	120	
Ge	72	1	No Gas	1668334	2.03	1651482	101.02	70	120	
In	115	1	No Gas	1769571	0.44	1818500	97.31	70	120	
Bi	209	1	No Gas	1452387	1.70	1577939	92.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	044_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:31:18-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
n	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.706	6.119	1137758	1.60	100	97.7	90	110	
Be	9	1	No Gas	94.602	4.043	326858	1.37	100	94.6	90	110	
V	51	2	He	98.772	0.376	484456	0.59	100	98.8	90	110	
Cr	52	2	He	99.290	1.019	538698	0.23	100	99.3	90	110	
Fe	56	2	He	9896.426	0.880	47307408	0.66	10000	99.0	90	110	
Se	78	2	He	94.892	1.904	8050	1.29	100	94.9	90	110	
As	75	2	He	96.125	0.911	75422	0.22	100	96.1	90	110	
Ca	44	2	He	9701.278	1.613	388712	1.38	10000	97.0	90	110	
Na	23	2	He	9928.371	1.067	9321097	0.46	10000	99.3	90	110	
Mg	24	2	He	9984.250	2.240	5841161	1.56	10000	99.8	90	110	
K	39	2	He	9951.527	0.908	7911865	1.83	10000	99.5	90	110	
Mn	55	2	He	98.518	1.200	417212	0.52	100	98.5	90	110	
Co	59	2	He	96.500	1.164	692501	0.35	100	96.5	90	110	
Ni	60	2	He	98.436	1.586	170819	1.66	100	98.4	90	110	
Cu	63	2	He	98.572	1.858	424950	1.19	100	98.6	90	110	
Zn	66	2	He	97.702	1.680	90937	0.74	100	97.7	90	110	
Al	27	2	He	98.432	1.382	44124	2.19	100	98.4	90	110	
B	11	1	No Gas	476.409	3.502	907023	1.98	500	95.3	90	110	
Al	27	1	No Gas	99.863	1.463	1318613	1.74	100	99.9	90	110	
Si	28	1	No Gas	489.607	1.819	3784223	0.68	5000	9.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.727	3.199	1243486	2.83	100	98.7	90	110	
Cd	111	1	No Gas	99.378	1.534	231233	0.88	100	99.4	90	110	
Sr	88	1	No Gas	101.027	4.361	2526404	2.85	100	101.0	90	110	
Mo	95	1	No Gas	96.997	4.222	489949	2.11	100	97.0	90	110	
Sn	118	1	No Gas	101.485	1.846	738513	1.00	100	101.5	90	110	
Sb	121	1	No Gas	100.223	2.086	1088430	1.76	100	100.2	90	110	
Ba	137	1	No Gas	99.647	1.426	385424	1.63	100	99.6	90	110	
Tl	205	1	No Gas	99.943	4.754	1854847	1.62	100	99.9	90	110	
Tl	203	1	No Gas	97.570	1.028	760010	2.11	100	97.6	90	110	
Pb	208	1	No Gas	96.878	3.286	2767192	0.45	100	96.9	90	110	
U	238	1	No Gas	99.279	2.679	2861459	1.66	100	99.3	90	110	
Ca	43	2	He	10370.641	3.797	23751	2.94	10000	103.7	90	110	
Sb	121	2	He	96.199	1.095	447543	1.27	100	96.2	90	110	
Ti	47	2	He	96.968	1.922	20165	1.95	100	97.0	90	110	
Cu	63	1	No Gas	99.799	2.007	979391	1.94	100	99.8	90	110	
Se	82	1	No Gas	99.027	1.829	17386	1.15	100	99.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	670653	5.28	709619	94.51	70	120	
Ge	72	2	He	459597	0.94	445920	103.07	70	120	
Ge	72	1	No Gas	1656115	1.16	1651482	100.28	70	120	
In	115	1	No Gas	1788216	2.31	1818500	98.33	70	120	
Bi	209	1	No Gas	1574980	3.07	1577939	99.81	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:33:10-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.525	7.2	51432	2.2	0.5	CCB Main CR1 Failed
Be	9	1	No Gas	0.005	71.5	73	17.2	0.5	
V	51	2	He	-0.060	-15.2	3137	0.5	2.5	
Cr	52	2	He	0.256	9.3	10978	2.0	2.5	
Fe	56	2	He	1.494	27.3	26419	6.5	100	
Se	78	2	He	0.110	52.4	163	3.5	2	
As	75	2	He	0.060	27.1	242	5.6	2.5	
Ca	44	2	He	5.881	36.2	987	9.2	100	
Na	23	2	He	16.918	18.7	105537	1.9	100	
Mg	24	2	He	1.729	30.9	1583	18.7	100	
K	39	2	He	-2.348	-123.1	137331	0.7	100	
Mn	55	2	He	-0.005	-954.8	2167	9.1	2.5	
Co	59	2	He	0.007	63.0	317	10.2	2.5	
Ni	60	2	He	0.014	218.7	233	21.1	2.5	
Cu	63	2	He	-0.056	-27.8	907	8.1	2	
Zn	66	2	He	0.022	794.7	573	27.9	2.5	
Al	27	2	He	0.468	96.0	1127	16.8	5	
B	11	1	No Gas	9.234	5.0	25201	4.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.209	-17.4	28539	2.2	5	
Si	28	1	No Gas	-3.460	-9.0	450836	0.3	10	
Ag	107	1	No Gas	0.006	111.5	353	22.9	2.5	
Cd	111	1	No Gas	0.011	64.0	30	57.7	1	
Sr	88	1	No Gas	0.006	113.8	1123	13.5	2.5	
Mo	95	1	No Gas	0.088	27.7	623	20.9	2.5	
Sn	118	1	No Gas	0.099	6.3	1887	1.6	5	
Sb	121	1	No Gas	0.147	15.4	1793	13.6	2.5	
Ba	137	1	No Gas	-0.027	-64.8	160	43.8	2.5	
Tl	205	1	No Gas	0.879	31.5	18235	29.8	1	
Tl	203	1	No Gas	0.843	27.7	7442	26.0	1	
Pb	208	1	No Gas	0.015	43.1	1483	13.6	2.5	
U	238	1	No Gas	0.027	31.2	840	30.0	2.5	
Ca	43	2	He	-6.319	-68.4	20	50.0	100	
Sb	121	2	He	0.115	6.0	610	4.3	2.5	
Ti	47	2	He	-0.082	-34.2	3	173.2	2.5	
Cu	63	1	No Gas	-0.040	-37.4	2140	6.7	2.5	
Se	82	1	No Gas	-0.903	-12.9	-16	-135.4	2	

QC ISTD Table

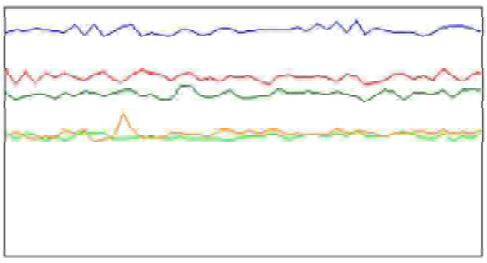
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	694006	1.54	709619	97.80	70	120	
Ge	72	2	He	460332	0.96	445920	103.23	70	120	
Ge	72	1	No Gas	1722642	0.57	1651482	104.31	70	120	
In	115	1	No Gas	1848636	1.59	1818500	101.66	70	120	
Bi	209	1	No Gas	1596770	1.13	1577939	101.19	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq. Date-Time	8/7/2023 11:01:21 AM
Report Comment	---
Instrument Name	G8421A SG18523544

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	5000	3625	36251.66		
24	20000	9708	97084.31		
59	20000	18264	182640.51		
115	50000	24860	248602.40		
208	20000	13142	131421.37		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.150	5.000	
24	1.952	5.000	
59	1.784	5.000	
115	3.115	5.000	
208	2.163	5.000	

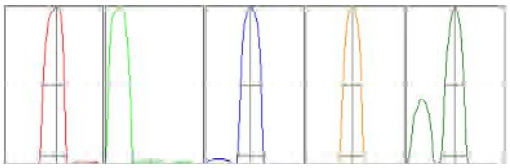
Mass	Background	Background (Required)	Background (Flag)
9	0.900		
24	1.000		
59	0.800		
115	0.600		
208	2.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.176 %
Doubly Charged	70 / 140 0.839 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	3728.05	9.10	8.90 - 9.10	
24	9859.05	23.90	23.90 - 24.10	
59	18691.58	58.90	58.90 - 59.10	
115	25144.32	114.95	114.90 - 115.10	
208	13149.23	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.66	0.789		
24	0.67	0.786		
59	0.61	0.779		
115	0.55	0.730		
208	0.59	0.777		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.48 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.4 V	Deflect	15.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	134	Axis Gain	1.0005	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.08		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-0.9 mm

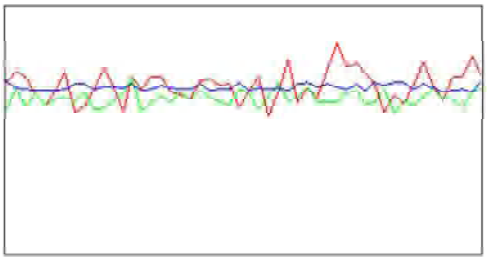
EM

Discriminator	4.7 mV	Analog HV	2967 V	Pulse HV	1613 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	200	137	1366.87		
24	1000	631	6306.42		
59	10000	6755	67547.88		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

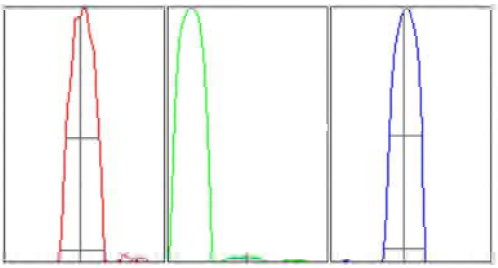
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.449	5.000	Fail
24	4.723	5.000	
59	1.984	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.300		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.663 %
Doubly Charged	70 / 140 0.975 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	134.01	8.95	8.90 - 9.10	
24	656.18	24.00	23.90 - 24.10	
59	6810.12	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.823		
24	0.64	0.787		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.774		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.48 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.2 V	Deflect	0.4 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.6 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	134	Axis Gain	1.0005	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.08		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-0.9 mm

EM

Discriminator	4.7 mV	Analog HV	2967 V	Pulse HV	1613 V

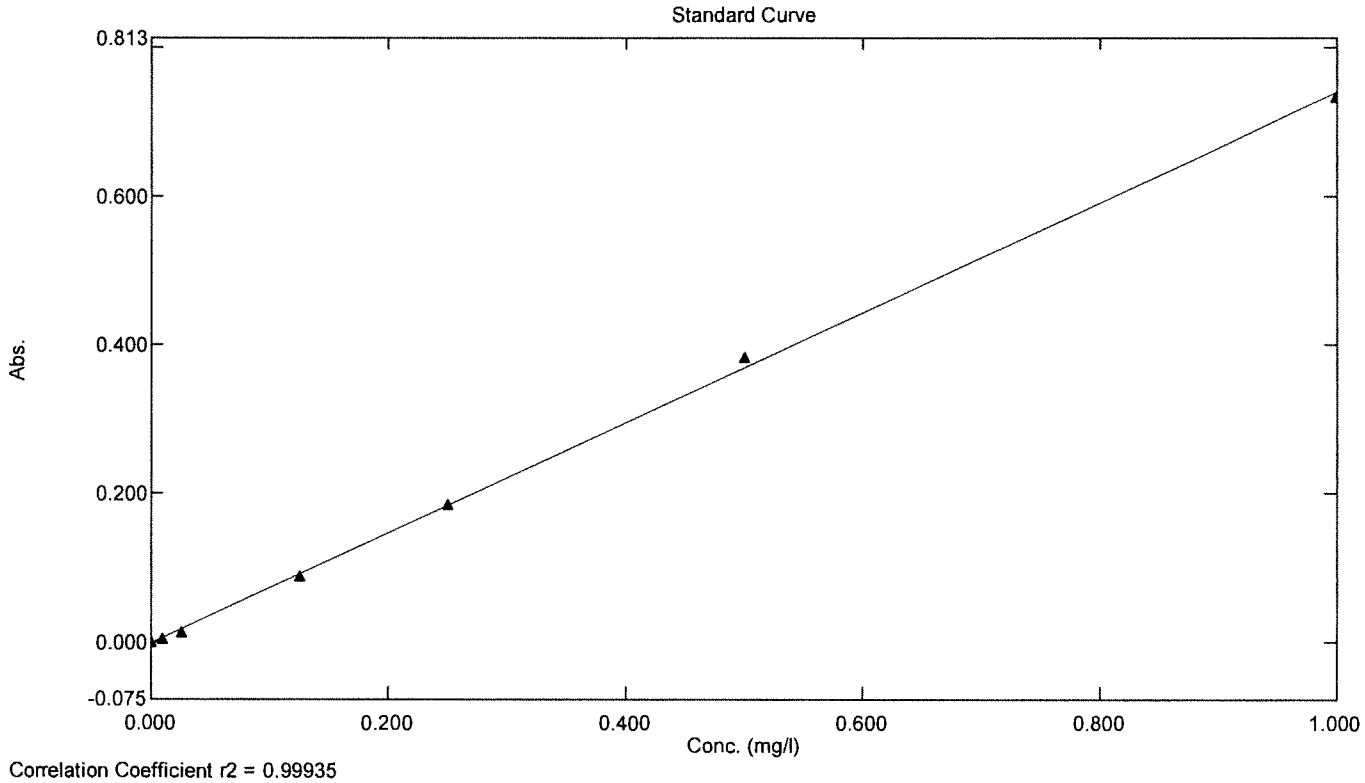
HS23080101 Wetchem Cr6_W

ALS WO# HS23080101

Standard Table Report

08/08/2023 05:02:42 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\CR6+_UNKNOWN\2023\08082023CR6_W.pho..pho



Correlation Coefficient r2 = 0.99935

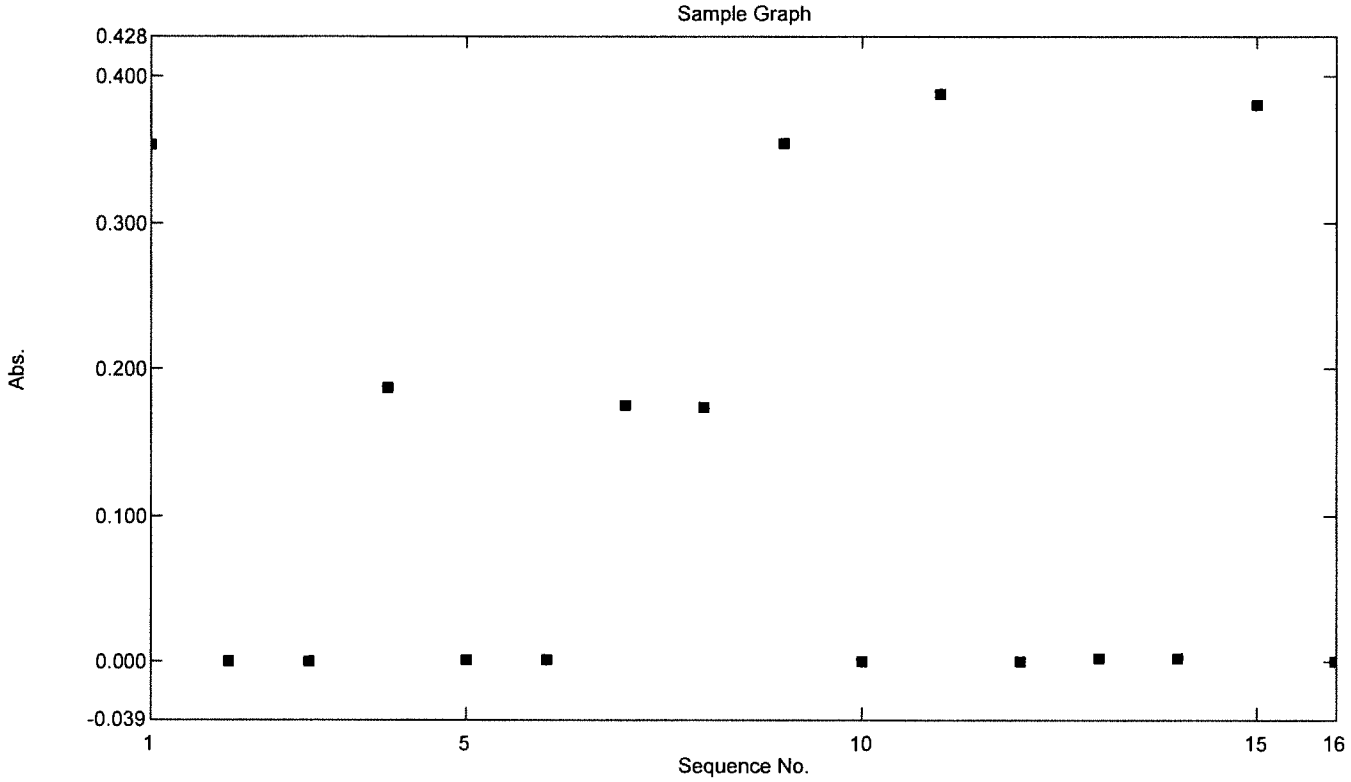
Standard Table

	Sample ID	Type	Ex	Conc	WL540.0	Wgt.Factor	Comments
1	STD1	Standard		0.000	0.000	1.000	
2	STD2	Standard		0.010	0.004	1.000	
3	STD3	Standard		0.025	0.013	1.000	
4	STD4	Standard		0.125	0.089	1.000	
5	STD5	Standard		0.250	0.186	1.000	
6	STD6	Standard		0.500	0.383	1.000	
7	STD7	Standard		1.000	0.733	1.000	10/13/2023
8							

Sample Table Report

08/08/2023 05:02:54 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\CR6+_UNKNOWN\2023\08082023CR6_W.pho..pho



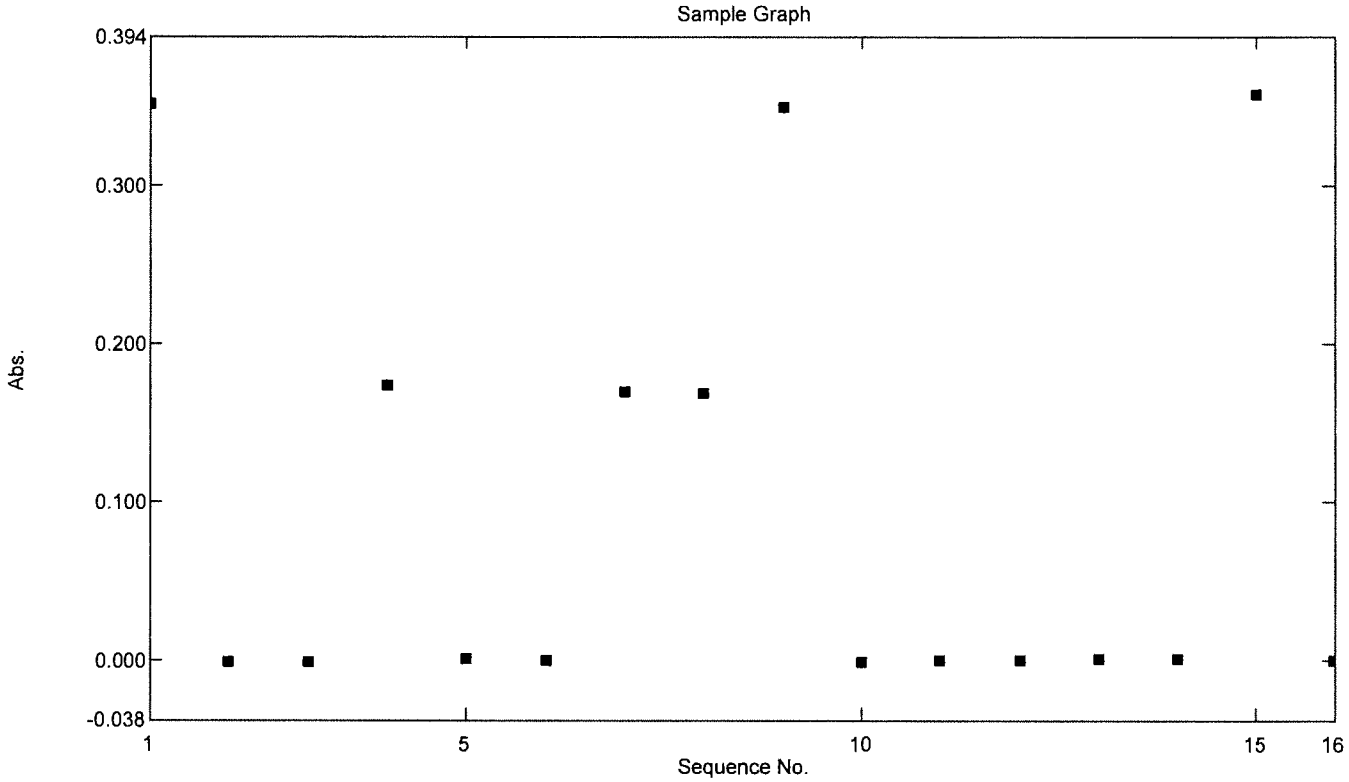
Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL540.0	Comments
1	CCV	Unknown		08/08/2023	10:27:22 AM	0.479	0.354	3221433606 IC-4
2	CCB	Unknown		08/08/2023	10:27:33 AM	0.001	-0.000	3100606911
3	MBLK	Unknown		08/08/2023	10:27:35 AM	0.001	0.000	3221433605 IC-4
4	LCS	Unknown		08/08/2023	10:27:55 AM	0.254	0.187	322142602 UV-03
5	HS23080437.01	Unknown		08/08/2023	10:28:22 AM	0.002	0.001	-0.001
6	HS23080437.01BKG	Unknown		08/08/2023	10:28:24 AM	0.003	0.001	PF:50X
7	HS23080437.01MS	Unknown		08/08/2023	10:28:54 AM	0.237	0.175	PF:50X
8	HS23080437.01MSD	Unknown		08/08/2023	10:28:56 AM	0.237	0.175	PF:50X
9	CCV2	Unknown		08/08/2023	10:29:09 AM	0.480	0.355	
10	CCB2	Unknown		08/08/2023	10:29:19 AM	0.002	0.000	
11	CCV3	Unknown		08/08/2023	05:01:09 PM	0.526	0.389	
12	CCB3	Unknown		08/08/2023	05:01:15 PM	0.001	0.000	
13	HS23080505.01	Unknown		08/08/2023	05:02:10 PM	0.005	0.003	OOH
14	HS23080505.01BKG	Unknown		08/08/2023	05:02:12 PM	0.005	0.003	0.000
15	CCV4	Unknown		08/08/2023	05:02:31 PM	0.515	0.381	
16	CCB4	Unknown		08/08/2023	05:02:37 PM	0.001	0.000	
17								

Sample Table Report

08/08/2023 05:35:06 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\CR6+_UNKNOWN\2023\08022023CR6_W.pho



Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL540.0	Comments
1	CCV	Unknown		08/02/2023	10:35:21 AM	0.475	0.351	3221433606 IC-4
2	CCB	Unknown		08/02/2023	10:35:33 AM	-0.001	-0.001	3100606911
3	MBLK	Unknown		08/02/2023	10:35:36 AM	-0.001	-0.001	32221433605 IC-5
4	LCS	Unknown		08/02/2023	10:35:42 AM	0.236	0.174	322142602 UV-3
5	HS23080061.01	Unknown		08/02/2023	10:36:28 AM	0.003	0.001	PF:50X
6	HS23080061.01BKG	Unknown		08/02/2023	10:36:30 AM	0.000	-0.001	
7	HS23080061.01MS	Unknown		08/02/2023	10:37:09 AM	0.230	0.169	PF:50X
8	HS23080061.01MSD	Unknown		08/02/2023	10:37:12 AM	0.230	0.169	PF:50X
9	CCV2	Unknown		08/02/2023	10:37:20 AM	0.474	0.350	
10	CCB2	Unknown		08/02/2023	10:37:26 AM	-0.001	-0.002	
11	HS23080101.01	Unknown		08/02/2023	11:43:14 AM	0.000	-0.001	
12	HS23080101.01BKG	Unknown		08/02/2023	11:43:16 AM	0.000	-0.001	0.000
13	HS23080101.02	Unknown		08/02/2023	11:43:35 AM	0.003	0.001	
14	HS23080101.02BKG	Unknown		08/02/2023	11:43:38 AM	0.003	0.001	
15	CCV3	Unknown		08/02/2023	11:44:03 AM	0.485	0.358	
16	CCB3	Unknown		08/02/2023	11:44:12 AM	0.001	-0.000	
17								

HS2308 0102-01

HS23080101-E2300708 Perchlorate Final Report IV

ALS WO# HS23080101

August 09, 2023 Service Request No:E2300708

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080101

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 02, 2023
For your reference, these analyses have been assigned our service request number **E2300708.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300708
Project:	HS23080101	**Date Received:**	08/02/23
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt.

One sample was received for analysis at ALS Environmental in Houston on 08/02/23.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300381: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300708
Project: HS23080101

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300708-001	LH18/24-SP650_080123_AIX	8/1/2023	1300

Service Request Summary

Folder #: **E2300708**
Client Name: ALS Environmental - US
Project Name: HS23080101
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080101
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300708-001	LH18/24-SP650_080123_AIX	Water	08/01/23 1300	IV

Service Request Summary

Folder #: **E2300708**
Client Name: ALS Environmental - US
Project Name: HS23080101
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080101
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22575

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080101
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080101-02**	**LH18/24-SP650_080123_AIX**	**Water**	**01 Aug 2023 13:00**
	Provide Level II and Level IV reports in separate pdf			09 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: NR Date/Time:

Received By: Date/Time: 8.2.23 1045

Cooler ID(s): Temperature(s):

ALS Environmental

Cooler Receipt Form

Project Chemist JY

Client/Project ALS

Thermometer ID 1231

Date/Time Received: 8-2-23 Initials: LJ

Date/Time Logged in: 8.2.23 Initials LJ

1. Method of delivery: ◯ US Mail ◯ Fed Ex ◯ UPS ◯ DHL ☒ ALS Courier ◯ Client

2. Samples received in: ☒ Cooler ◯ Box ◯ Envelope ◯ Other

3. Were custody seals on coolers? ◯ Yes ☒ No

Were they intact? ◯ Yes ◯ No ☒ N/A

Were they signed and dated? ◯ Yes ◯ No ☒ N/A

If yes, how many and where?

4. Packing Material: ◯ Inserts ☒ Baggies ◯ Bubble Wrap ◯ Gel Packs ☒ Wet Ice ◯ Sleeves ◯ Other

5. Foreign or Regulated Soil? ◯ Yes ◯ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-2-23	1049	LJ	5.2	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ◯ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ◯ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ◯ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ◯ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ◯ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300708-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2300709-001	LH18/24-SP140_080123	.01	6850/ClO4 DOD			Water	10mL	
3	E2300711-001	04WW09_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300711-002	04WW10_080123	.02	6850/ClO4 DOD			Ground Water	10mL	
5	E2300711-003	04WW05_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300711-004	04WW11_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300711-005	04WW07_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300711-006	04WW07_080123_a	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300711-007	04WW04_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300711-008	04WW01_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300716-001	1824DPTMW07_080223	.01	6850/ClO4 DOD			Water	10mL	
12	E2300718-001	LH18/24-SP650_080823_Between IX	.01	6850/ClO4 DOD			Water	10mL	
13	E2300718-002	LH18/24-SP650_080823_AIX	.01	6850/ClO4 DOD			Water	10mL	
14	E2300718-003	LH18/24-SP650_080823_BIX	.01	6850/ClO4 DOD			Water	10mL	
15	EQ2300381-01	MB		6850/ClO4			Liquid	10mL	
16	EQ2300381-02	LCS		6850/ClO4			Liquid	10mL	
17	EQ2300381-03	DLCS		6850/ClO4			Liquid	10mL	
18	EQ2300381-04	04WW10_080123 MS	.02	6850/ClO4 DOD			Liquid	10mL	
19	EQ2300381-05	04WW10_080123 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
20	K2308781-001	LGAC-INF-080723	.01	6850/ClO4			Water	10mL	
21	K2308781-002	LGAC-INT1-080723	.01	6850/ClO4			Water	10mL	
22	K2308781-003	LGAC-INT2-080723	.01	6850/ClO4			Water	10mL	
23	R2306562-017	2307210621 PFE-1	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300381-02	1.00µL	EQ2300381-02	1.00µL	EQ2300381-03	1.00µL	EQ2300381-03	1.00µL	EQ2300381-04	1.00µL	EQ2300381-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300708-001	100.00µL	E2300709-001	100.00µL	E2300711-001	100.00µL	E2300711-002	100.00µL	E2300711-003	100.00µL	E2300711-004	100.00µL
E2300711-005	100.00µL	E2300711-006	100.00µL	E2300711-007	100.00µL	E2300711-008	100.00µL	E2300716-001	100.00µL	E2300718-001	100.00µL
E2300718-002	100.00µL	E2300718-003	100.00µL	EQ2300381-01	100.00µL	EQ2300381-01	100.00µL	EQ2300381-02	100.00µL	EQ2300381-02	100.00µL
EQ2300381-03	100.00µL	EQ2300381-03	100.00µL	EQ2300381-04	100.00µL	EQ2300381-05	100.00µL	K2308781-001	100.00µL	K2308781-002	100.00µL
K2308781-003	100.00µL	R2306562-017	100.00µL								

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/9/23 09:01
Finished: 8/9/23 09:53
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP650_080123_AIX	**Units:**	µg/L
Lab Code:	E2300708-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**9.22**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 11:14	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300381-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:23	424245	813305	

Accuracy & Precision

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101
Sample Matrix: Water

Service Request: E2300708
Date Analyzed: 8/ 9/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424245

	Lab Control Sample EQ2300381-02			Duplicate Lab Control Sample EQ2300381-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.102	0.100	102	84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:34	424245	813305	

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230802-001	Perchlorate6850c.lcm	1x		8/2/2023 13:05
2	IB		2230802-002	Perchlorate6850c.lcm	1x		8/2/2023 13:11
3	Perchlorate ICAL 1		2230802-003	Perchlorate6850c.lcm	1x	230373	8/2/2023 13:17
4	Perchlorate ICAL 2		2230802-004	Perchlorate6850c.lcm	1x	230375	8/2/2023 13:23
5	Perchlorate ICAL 3		2230802-005	Perchlorate6850c.lcm	1x	230376	8/2/2023 13:28
6	Perchlorate ICAL 4		2230802-006	Perchlorate6850c.lcm	1x	230377	8/2/2023 13:34
7	Perchlorate ICAL 5		2230802-007	Perchlorate6850c.lcm	1x	230378	8/2/2023 13:39
8	Perchlorate ICAL 6		2230802-008	Perchlorate6850c.lcm	1x	230379	8/2/2023 13:45
9	Perchlorate ICAL 7		2230802-009	Perchlorate6850c.lcm	1x	230380	8/2/2023 13:50
10	Perchlorate ICAL 8		2230802-010	Perchlorate6850c.lcm	1x	230381	8/2/2023 13:56
11	Perchlorate ICAL 9		2230802-011	Perchlorate6850c.lcm	1x	230382	8/2/2023 14:02
12	Perchlorate ICAL 10		2230802-012	Perchlorate6850c.lcm	1x	230383	8/2/2023 14:07
13	PerchlorateICV		2230802-013	Perchlorate6850c.lcm	1x	230385	8/2/2023 14:19

Initial Calibration - Detailed Report

Calibration ID: EC2300012 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300012-01	Perchlorate ICAL 1	2230802-003	08/02/2023 13:17
02	EC2300012-02	Perchlorate ICAL 2	2230802-004	08/02/2023 13:23
03	EC2300012-03	Perchlorate ICAL 3	2230802-005	08/02/2023 13:28
04	EC2300012-04	Perchlorate ICAL 4	2230802-006	08/02/2023 13:34
05	EC2300012-05	Perchlorate ICAL 5	2230802-007	08/02/2023 13:39
06	EC2300012-06	Perchlorate ICAL 6	2230802-008	08/02/2023 13:45
07	EC2300012-07	Perchlorate ICAL 7	2230802-009	08/02/2023 13:50
08	EC2300012-08	Perchlorate ICAL 8	2230802-010	08/02/2023 13:56
09	EC2300012-09	Perchlorate ICAL 9	2230802-011	08/02/2023 14:02
10	EC2300012-10	Perchlorate ICAL 10	2230802-012	08/02/2023 14:07

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.086** **Average RF = 0.1475**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1428	02	0.5000	0.1421	03	0.7000	0.1457	04	1.0000	0.149
05	2.0000	0.1515	06	5.0000	0.1475	07	10.0000	0.1503	08	20.0000	0.1477
09	30.0000	0.1485	10	50.0000	0.1496						

Analyte

Perchlorate RSE = 2.09

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0968	-3.2	02	0.5000	0.482	-3.6	03	0.7000	0.692	-1.2
04	1.0000	1.01	1.0	05	2.0000	2.05	2.7	06	5.0000	5.00	-0.0
07	10.0000	10.2	1.9	08	20.0000	20.0	0.2	09	30.0000	30.2	0.7
10	50.0000	50.7	1.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300012	**Instrument ID:**	E-LCMS-01
Datafile ID:	2230802-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300012-11	T	Average RF	10	10.670	ng/mL	6.7	<= 15

Insight Report

Printed at 8/3/2023 9:30:46 AM

Method File: I:\LCMS01\DATA\20230802\20230802ICAL.lcm
Project File: I:\LCMS01\DATA\20230802\no use\20230802ICAL.damlp

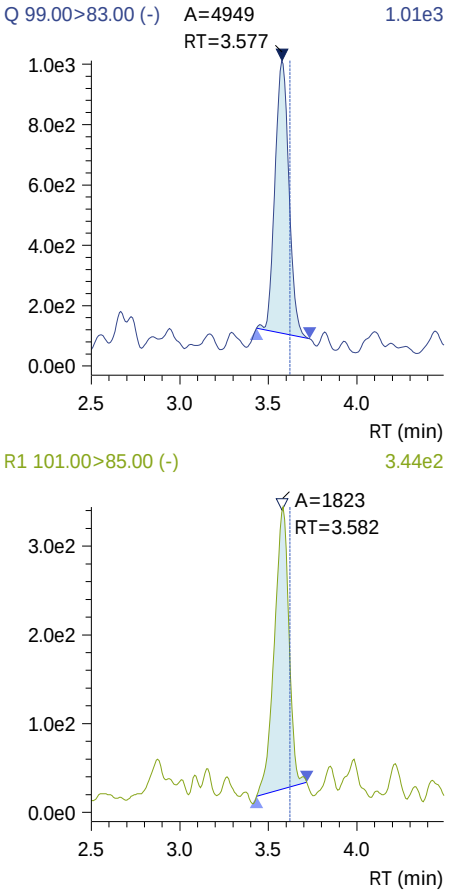
Perchlorate ICAL 1

Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	4949	346538	0.0968	ng/mL	101.00 >85.00	36.83	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.572	346538	346538	1.0000	ng/mL	----	----	

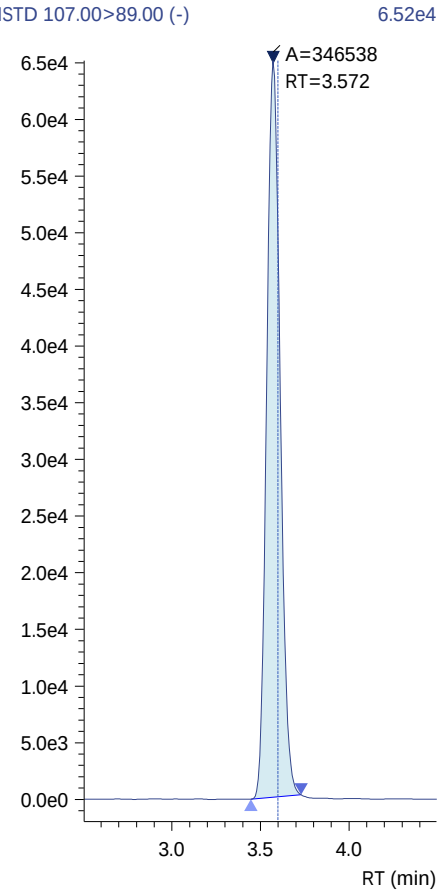
Perchlorate

Conc 0.0968
R#1 36.83 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

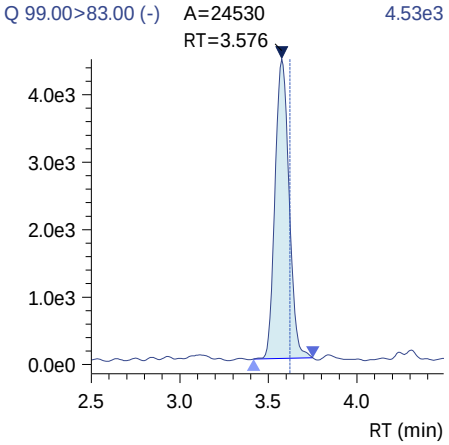
Perchlorate ICAL 2

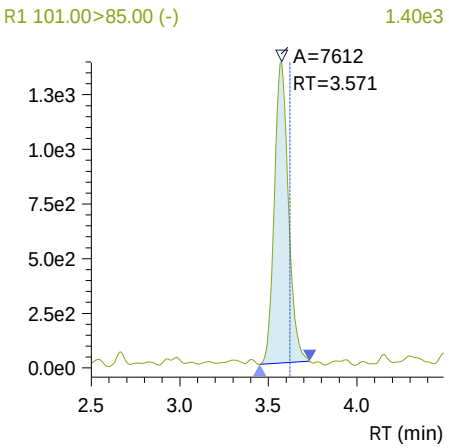
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	24530	345149	0.4820	ng/mL	101.00 >85.00	31.03	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.571	345149	345149	1.0000	ng/mL	----	----	

Perchlorate

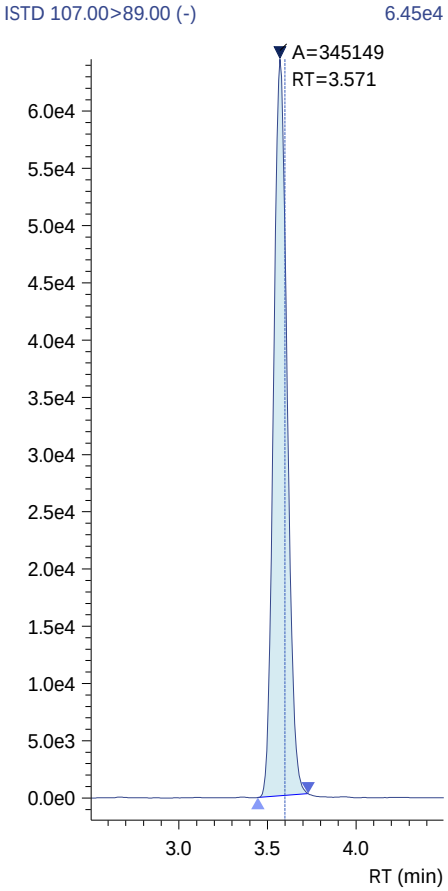
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

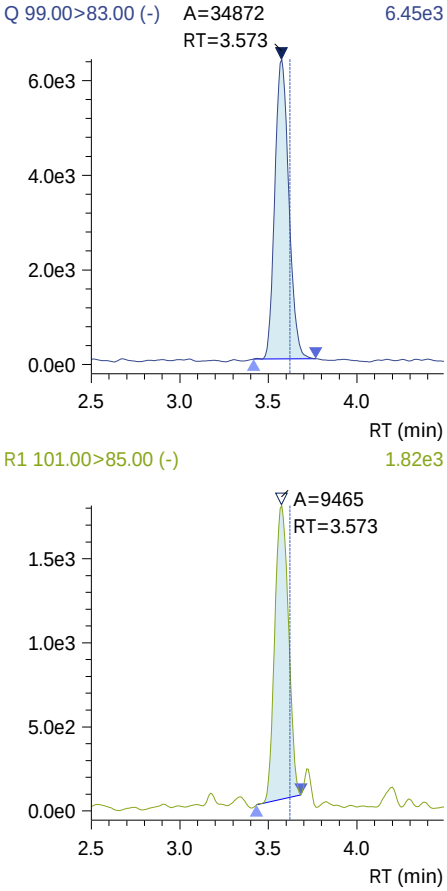
Perchlorate ICAL 3

Sample ID: Perchlorate ICAL 3
Date Acquired: 8/2/2023 1:28:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-005.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	34872	341974	0.6915	ng/mL	101.00 >85.00	27.14	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	341974	341974	1.0000	ng/mL	----	----	

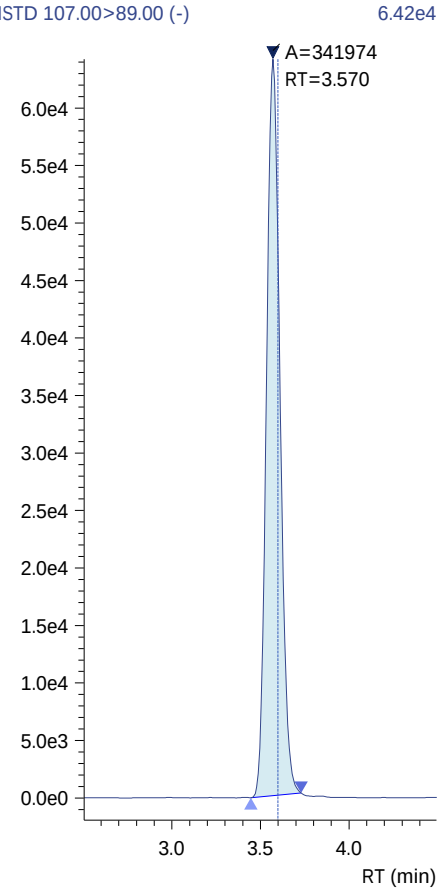
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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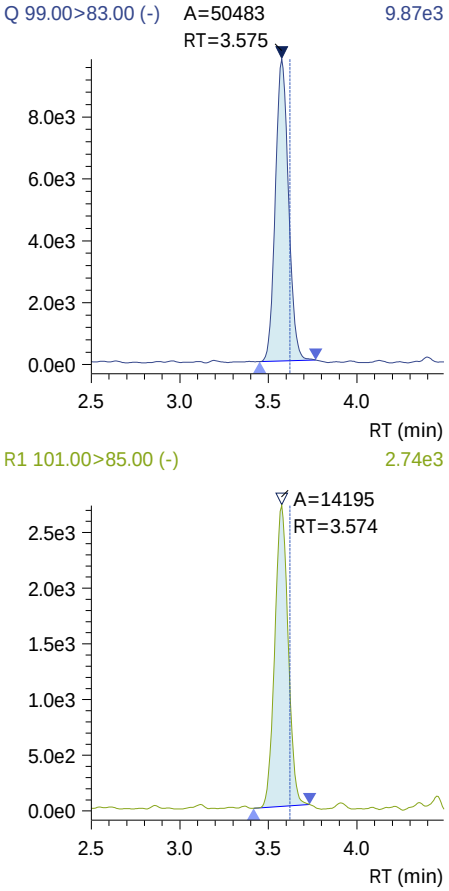
Perchlorate ICAL 4

Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	50483	338838	1.0104	ng/mL	101.00 >85.00	28.12	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	338838	338838	1.0000	ng/mL	----	----	

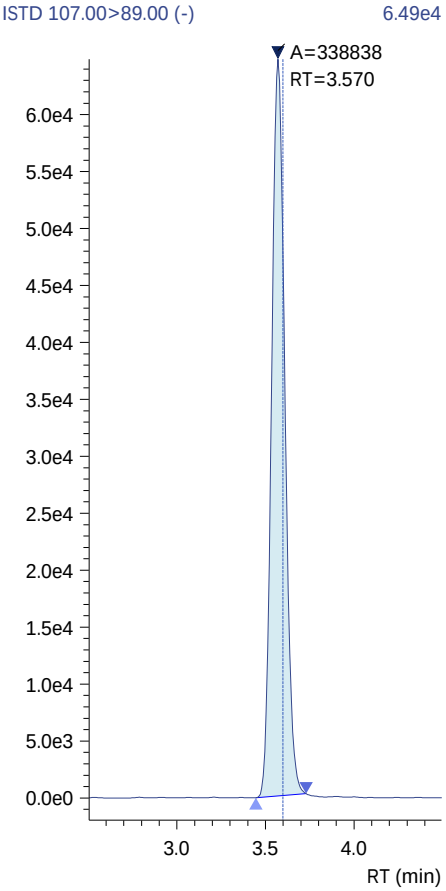
Perchlorate

Conc 1.0104
R#1 28.12 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

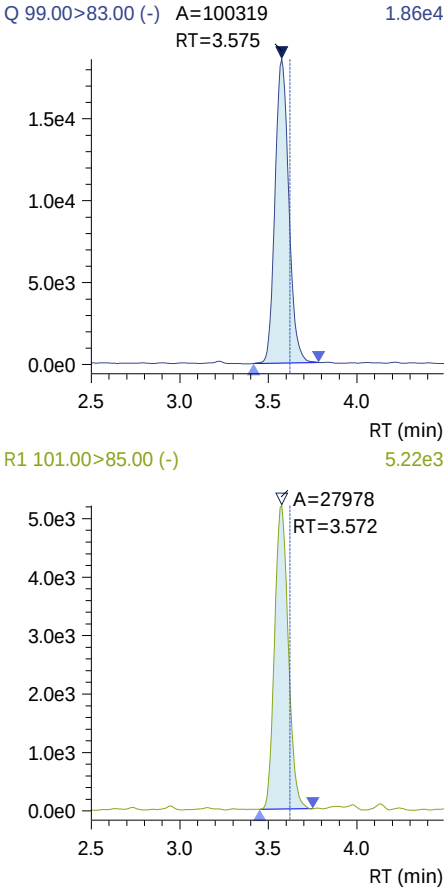
Perchlorate ICAL 5

Sample ID: Perchlorate ICAL 5
Date Acquired: 8/2/2023 1:39:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-007.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	100319	331124	2.0545	ng/mL	101.00 >85.00	27.89	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	331124	331124	1.0000	ng/mL	----	----	

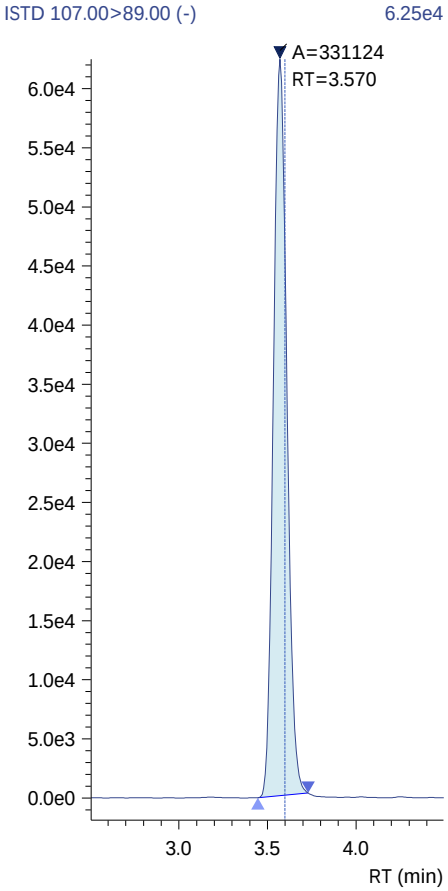
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

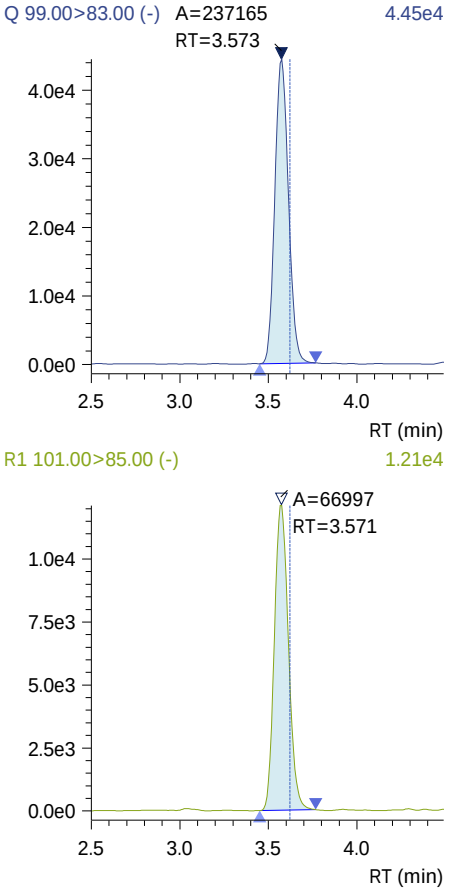
Perchlorate ICAL 6

Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	237165	321666	5.0000	ng/mL	101.00 >85.00	28.25	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	321666	321666	1.0000	ng/mL	----	----	

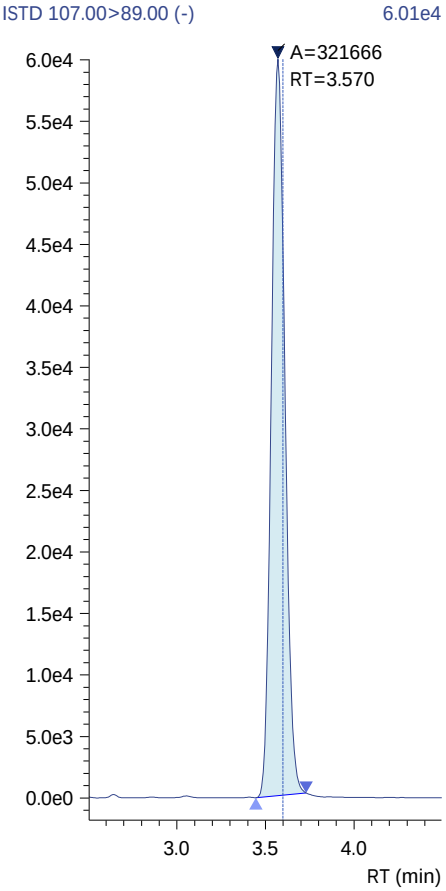
Perchlorate

Conc 5.0000
R#1 28.25 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

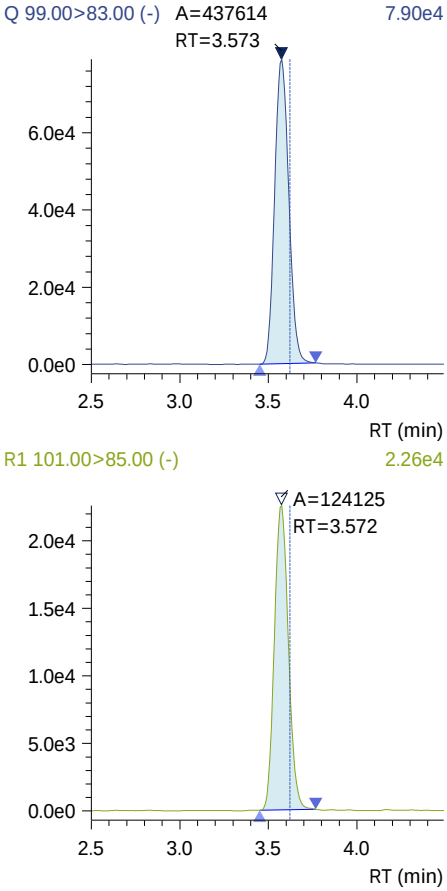
Perchlorate ICAL 7

Sample ID: Perchlorate ICAL 7
Date Acquired: 8/2/2023 1:50:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-009.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	437614	291215	10.1905	ng/mL	101.00 >85.00	28.36	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291215	291215	1.0000	ng/mL	----	----	

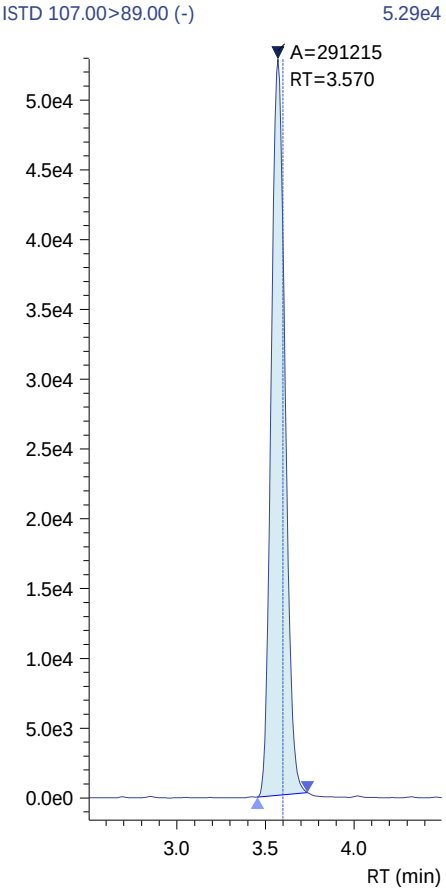
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Perchlorate ICAL 8

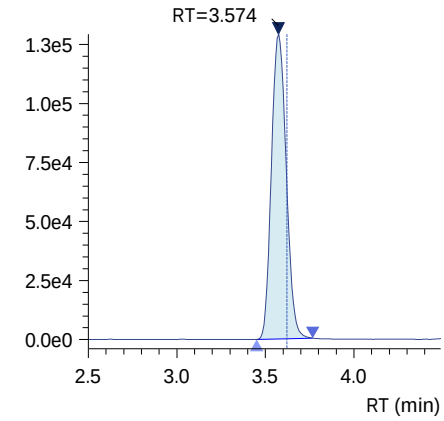
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	749856	253829	20.03 36	ng/mL	101.00 >85.00	28.56	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.569	253829	253829	1.0000	ng/mL	----	----	

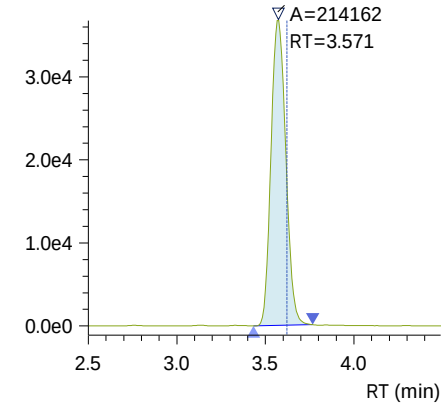
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



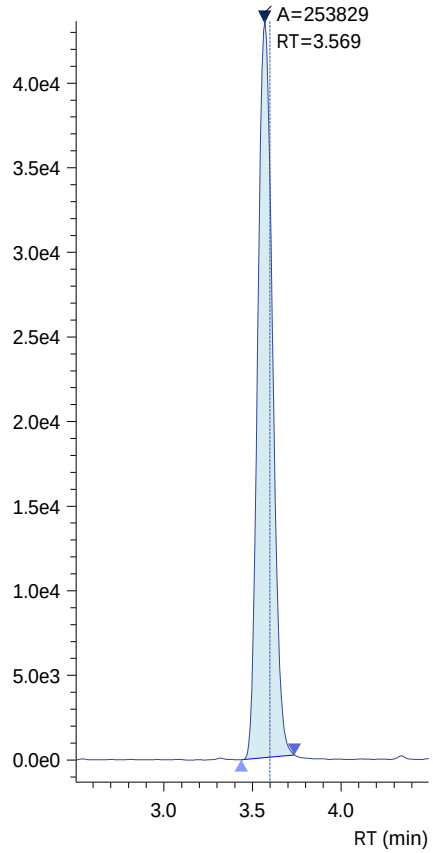
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 9

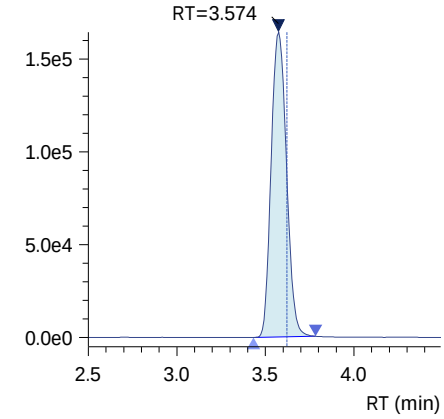
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	990671	222379	30.2105	ng/mL	101.00 >85.00	27.95	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.568	222379	222379	1.0000	ng/mL	----	----	

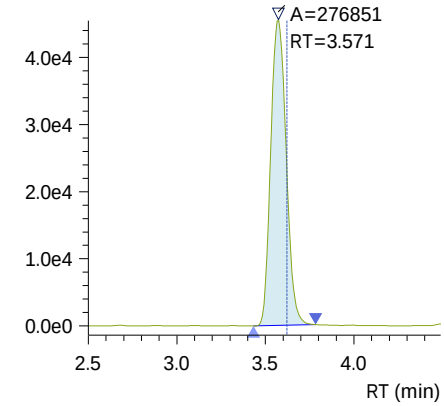
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 1.64e5



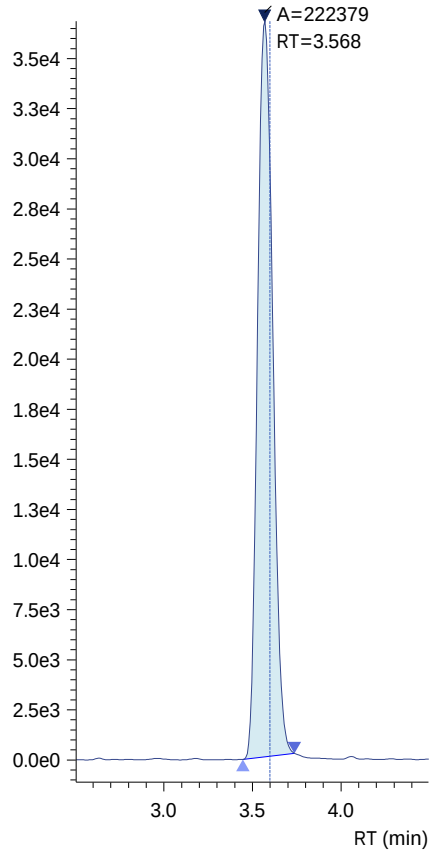
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 10

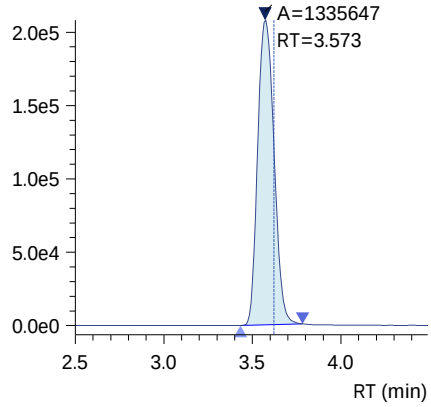
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1335647	178573	50.72 20	ng/mL	101.00 >85.00	28.04	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.567	178573	178573	1.0000	ng/mL	----	----	

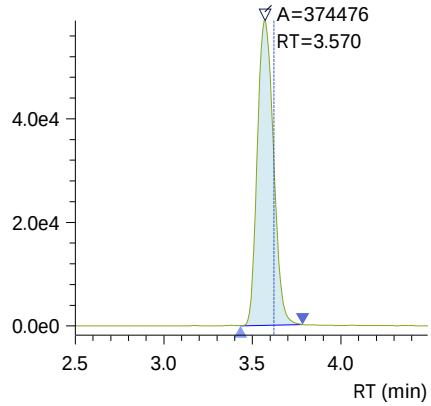
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



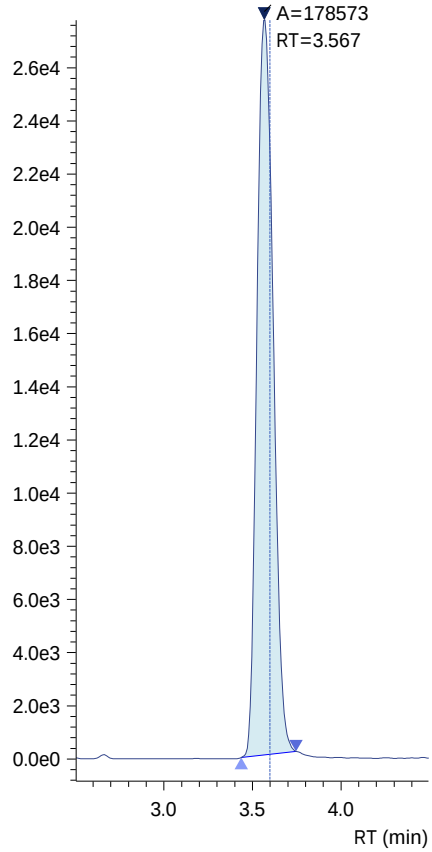
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

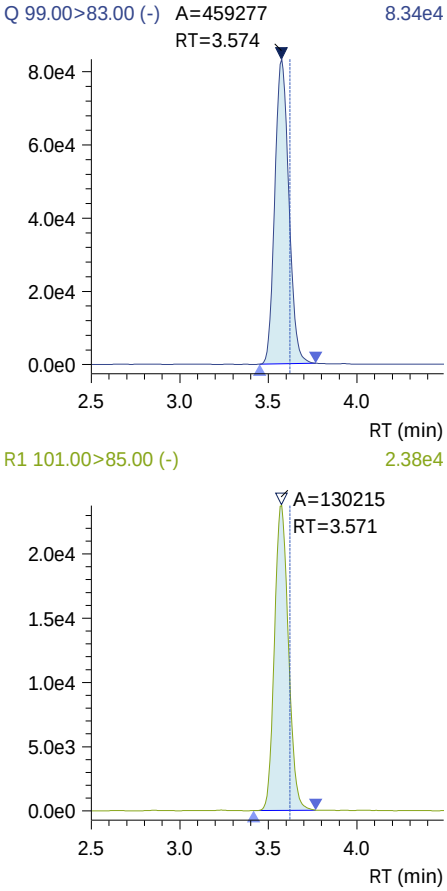
PerchlorateICV

Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	459277	291890	10.6703	ng/mL	101.00 >85.00	28.35	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291890	291890	1.0000	ng/mL	----	----	

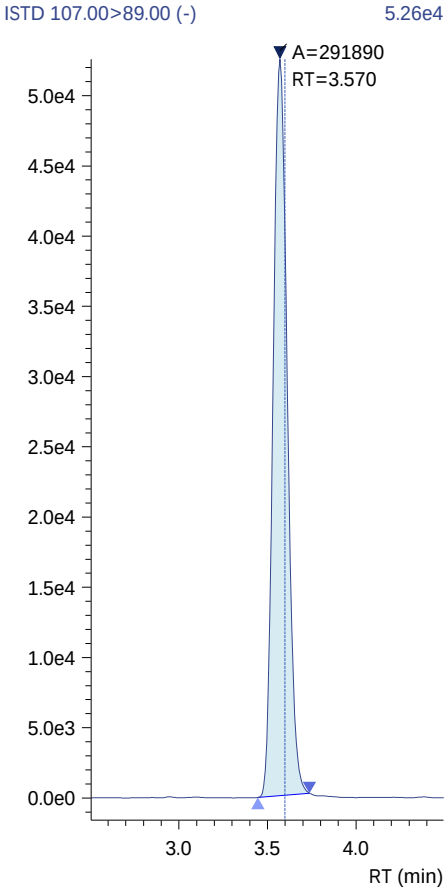
Perchlorate

Conc 10.6703
R#1 28.35 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230808-813305

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230808-001	Perchlorate6850c.lcm	1x		8/9/2023 9:59
2	LODV		2230808-002	Perchlorate6850c.lcm	1x	230386	8/9/2023 10:04
3	ICS		2230808-003	Perchlorate6850c.lcm	1x		8/9/2023 10:10
4	CCV		2230808-004	Perchlorate6850c.lcm	1x	230380	8/9/2023 10:18
5	EQ2300381-01		2230808-005	Perchlorate6850c.lcm	1x		8/9/2023 10:23
6	EQ2300381-02		2230808-006	Perchlorate6850c.lcm	1x		8/9/2023 10:29
7	EQ2300381-03		2230808-007	Perchlorate6850c.lcm	1x		8/9/2023 10:34
8	K2308781-001		2230808-008	Perchlorate6850c.lcm	1x		8/9/2023 10:46
9	K2308781-002		2230808-009	Perchlorate6850c.lcm	1x		8/9/2023 10:51
10	K2308781-003		2230808-010	Perchlorate6850c.lcm	1x		8/9/2023 10:57
11	R2306562-017		2230808-011	Perchlorate6850c.lcm	1x		8/9/2023 11:02
12	E2300716-001		2230808-012	Perchlorate6850c.lcm	1x		8/9/2023 11:08
13	E2300708-001		2230808-013	Perchlorate6850c.lcm	1x		8/9/2023 11:14
14	E2300709-001		2230808-014	Perchlorate6850c.lcm	1000x		8/9/2023 11:19
15	CCV		2230808-015	Perchlorate6850c.lcm	1x	230380	8/9/2023 11:25
16	E2300711-002		2230808-017	Perchlorate6850c.lcm	1x		8/9/2023 11:36
17	EQ2300381-04		2230808-018	Perchlorate6850c.lcm	1x		8/9/2023 11:41
18	EQ2300381-05		2230808-019	Perchlorate6850c.lcm	1x		8/9/2023 11:47
19	E2300711-001		2230808-016	Perchlorate6850c.lcm	1x	DNU-IS	8/9/2023 11:30
20	E2300711-003		2230808-020	Perchlorate6850c.lcm	1x		8/9/2023 11:53
21	E2300711-004		2230808-021	Perchlorate6850c.lcm	1x		8/9/2023 11:58
22	E2300711-005		2230808-022	Perchlorate6850c.lcm	1x		8/9/2023 12:04
23	E2300711-006		2230808-023	Perchlorate6850c.lcm	1x		8/9/2023 12:09
24	E2300711-007		2230808-024	Perchlorate6850c.lcm	1x		8/9/2023 12:15
25	E2300711-008		2230808-025	Perchlorate6850c.lcm	1x		8/9/2023 12:20
26	CCV		2230808-026	Perchlorate6850c.lcm	1x	230380	8/9/2023 12:26
27	E2300711-001		2230808-027	Perchlorate6850c.lcm	1x		8/9/2023 12:44
28	E2300718-001		2230808-028	Perchlorate6850c.lcm	1x		8/9/2023 13:06
29	E2300718-002		2230808-029	Perchlorate6850c.lcm	1x		8/9/2023 13:12
30	E2300718-003		2230808-030	Perchlorate6850c.lcm	10x		8/9/2023 13:29
32	CCV		2230803-031	Perchlorate6850c.lcm	1x	230380	8/3/2023 12:04

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-004

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1513	2.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1511	2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-026

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1495	1.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-031

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1505	2.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/9/23 10:18

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230808\2230808-004
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300385-01
Analysis Lot: 813305
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-01	293,010	3.58
Method Blank	EQ2300381-01	348,388	3.58
Lab Control Sample	EQ2300381-02	345,049	3.58
Duplicate Lab Control Sample	EQ2300381-03	340,635	3.58
LH18/24-SP650_080123_AIX	E2300708-001	326,290	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/9/23 11:25

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230808\2230808-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300385-02
Analysis Lot: 813305
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-02	289,217	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300708
Project:	HS23080101	**Date Analyzed:**	8/9/23 12:26

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-026	**Lab Code:**	EQ2300385-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-03	292,242	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080101

Service Request: E2300708
Date Analyzed: 8/9/23 13:38

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230808\2230808-031
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300385-04
Analysis Lot: 813305
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-04	288,788	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

Insight Report

Printed at 8/9/2023 1:55:45 PM

Method File: I:\LCMS01\DATA\20230808\20230808.lcm
Project File: I:\LCMS01\DATA\20230808\20230808.damlp

IB

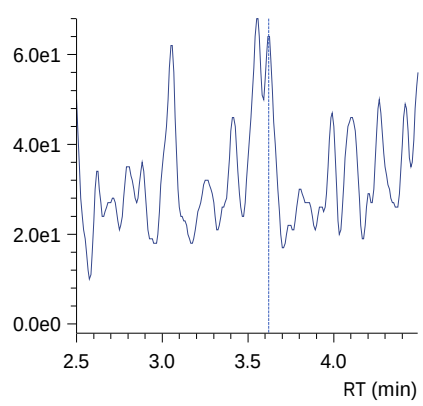
Sample ID: IB
Date Acquired: 8/9/2023 9:59:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	376063	----	ng/mL	101.00 >85.00	0.00	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.582	376063	376063	1.0000	ng/mL	----	----	

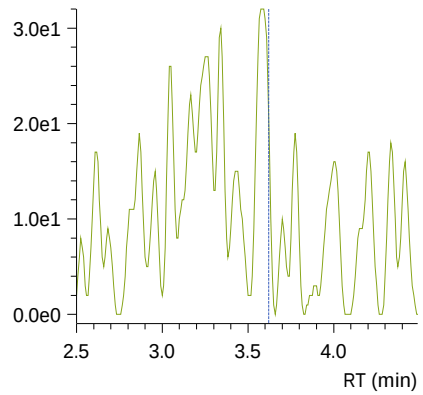
Perchlorate

Conc ----
R#1 0.00 (27.74)

Q 99.00>83.00 (-) 6.80e1



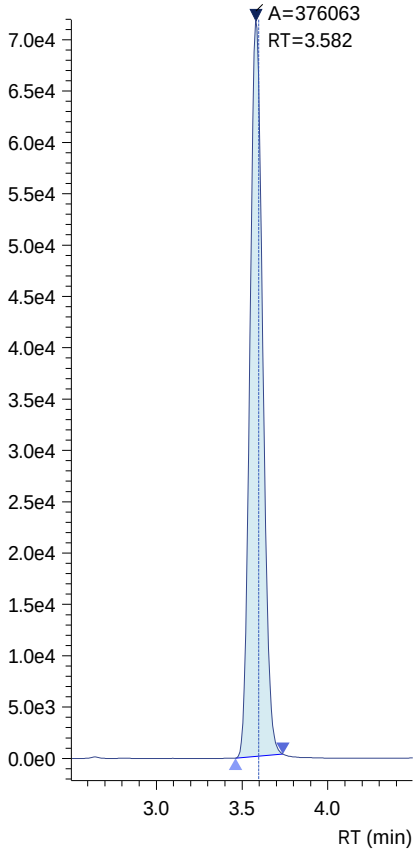
R1 101.00>85.00 (-) 3.20e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.20e4



Insight Report

Printed at 8/9/2023 1:55:45 PM

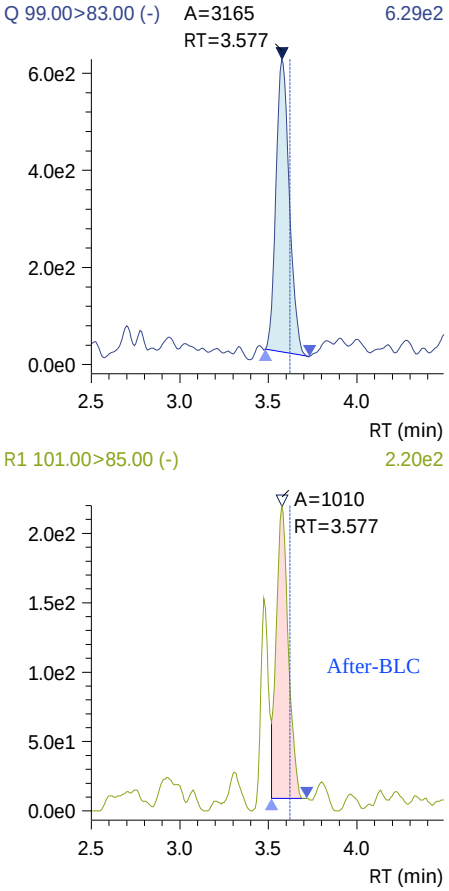
LODV

Sample ID: LODV
Date Acquired: 8/9/2023 10:04:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.577	3165	350096	0.0613	ng/mL	101.00 >85.00	31.90	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3500 96	350096	1.0000	ng/mL	----	----	

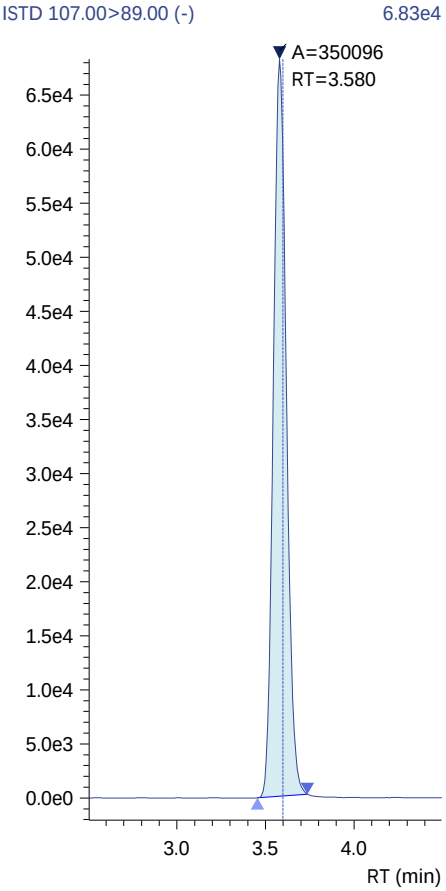
Perchlorate

Conc 0.0613
R#1 31.90 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

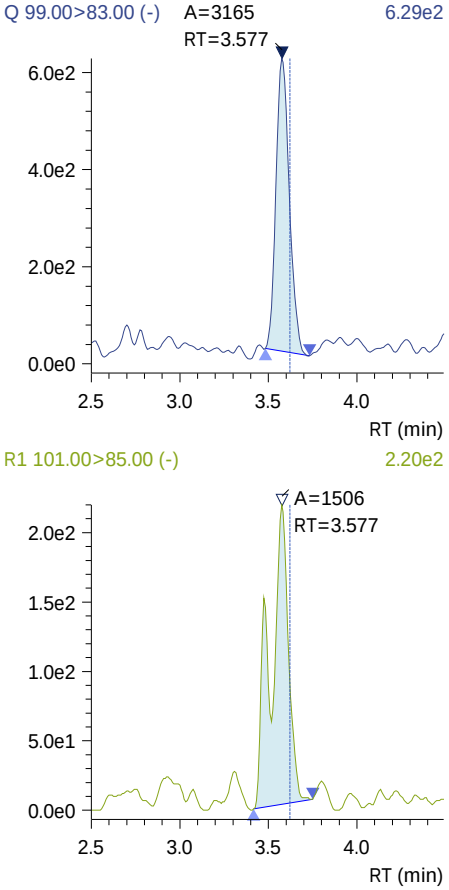
Method File: I:\LCMS01\DATA\20230808\20230808.lcm
Project File: I:\LCMS01\DATA\20230808\20230808.damlp

LODV

Sample ID: LODV
Date Acquired: 8/9/2023 10:04:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

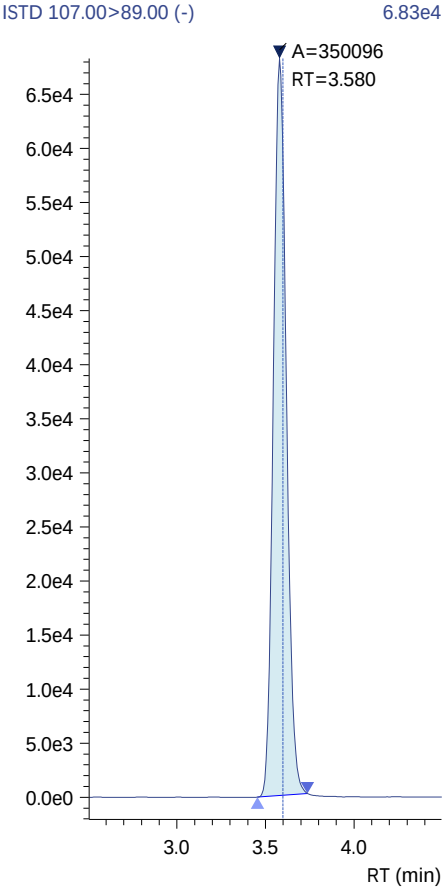
Perchlorate

Conc 0.0613
R#1 47.59 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

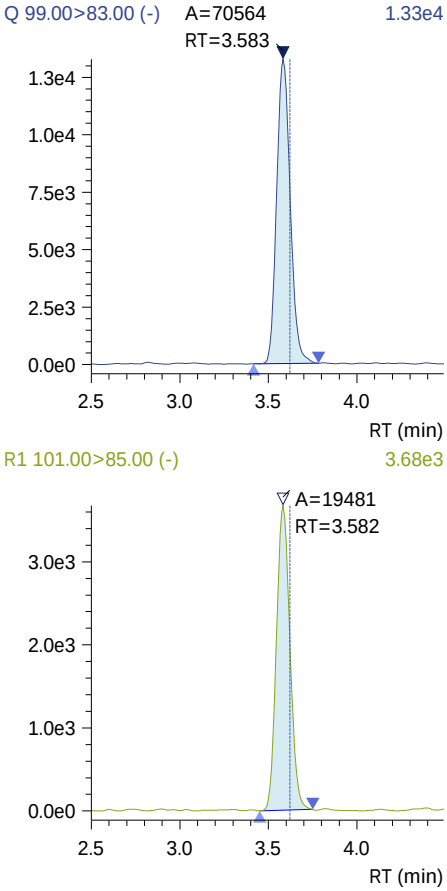
ICS

Sample ID: ICS
Date Acquired: 8/9/2023 10:10:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.583	70564	423644	1.1295	ng/mL	101.00 >85.00	27.61	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	4236 44	423644	1.0000	ng/mL	----	----	

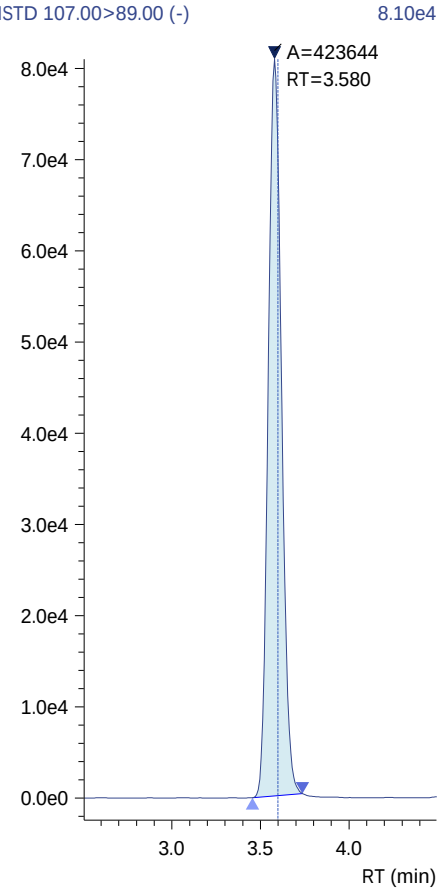
Perchlorate

Conc 1.1295
R#1 27.61 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

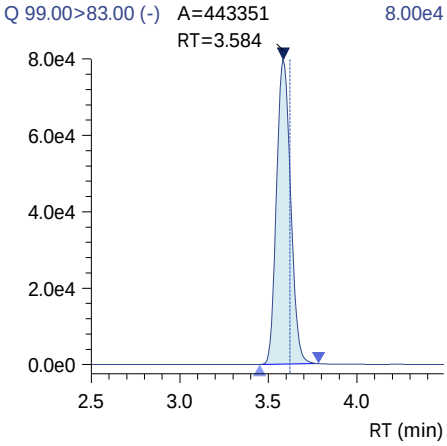
CCV

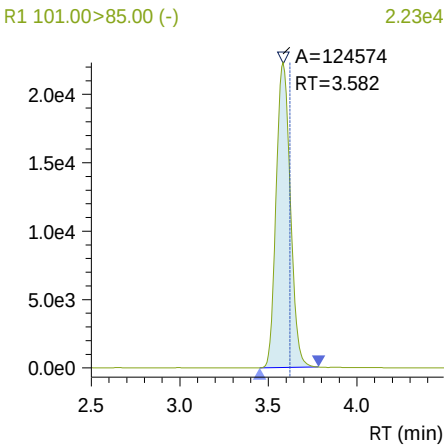
Sample ID: CCV
Date Acquired: 8/9/2023 10:18:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-004.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.584	443351	293010	10.2609	ng/mL	101.00 >85.00	28.10	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.580	293010	293010	1.0000	ng/mL	----	----	

Perchlorate

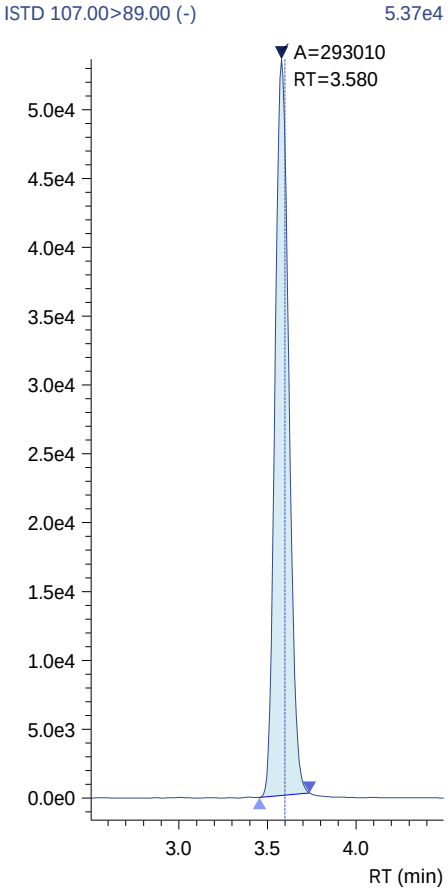
Conc 10.2609
R#1 28.10 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

EQ2300381-01

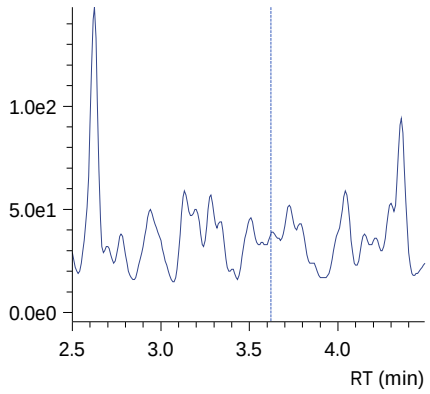
Sample ID: EQ2300381-01
Date Acquired: 8/9/2023 10:23:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-005.lcd
Vial: 25 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	348388	----	ng/mL	101.00 >85.00	0.00	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.579	348388	348388	1.0000	ng/mL	----	----	

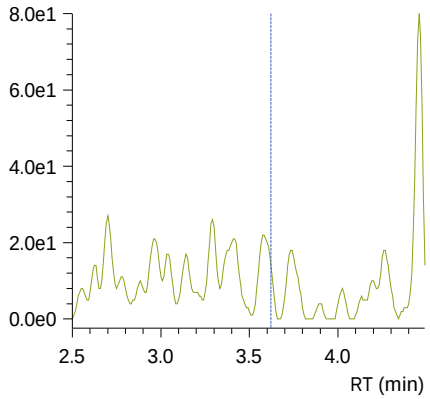
Perchlorate

Conc ----
R#1 0.00 (27.74)

Q 99.00>83.00 (-) 1.48e2



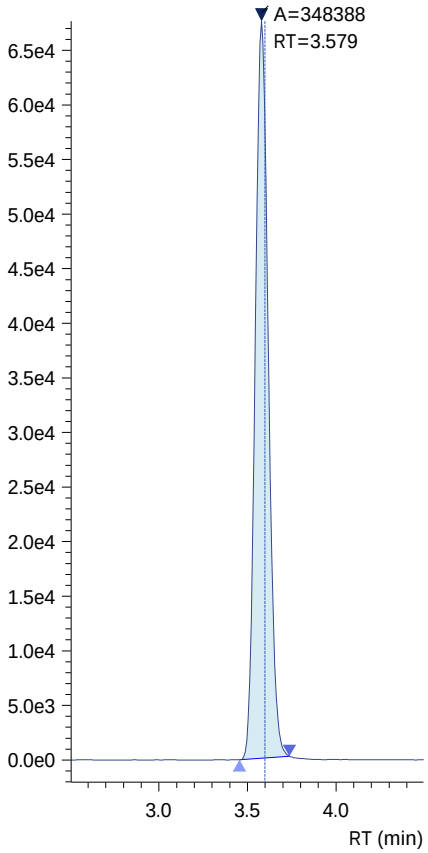
R1 101.00>85.00 (-) 8.00e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.77e4



Insight Report

Printed at 8/9/2023 1:55:45 PM

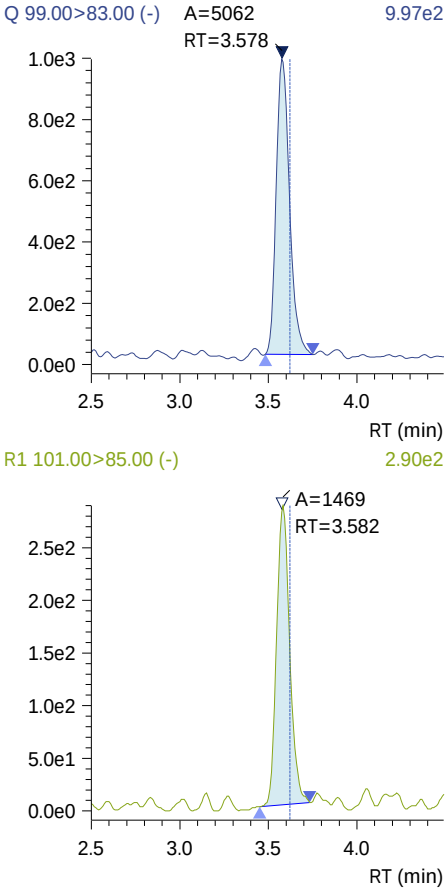
EQ2300381-02

Sample ID: EQ2300381-02
Date Acquired: 8/9/2023 10:29:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-006.lcd
Vial: 26 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	5062	345049	0.0995	ng/mL	101.00 >85.00	29.01	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3450 49	345049	1.0000	ng/mL	----	----	

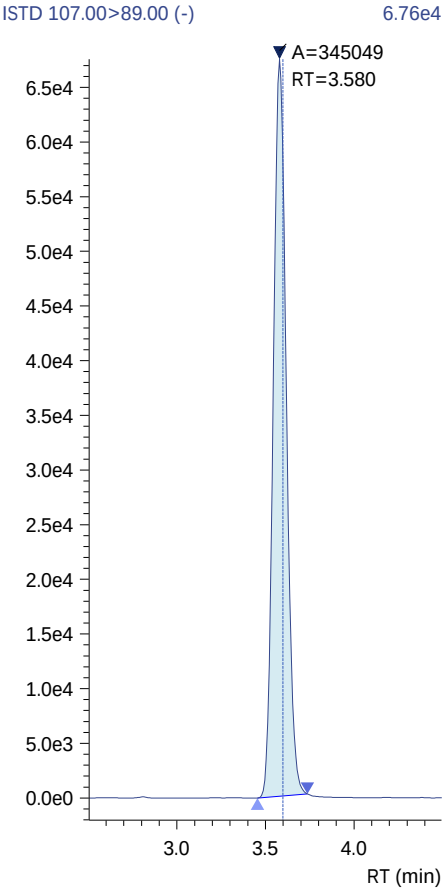
Perchlorate

Conc 0.0995
R#1 29.01 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

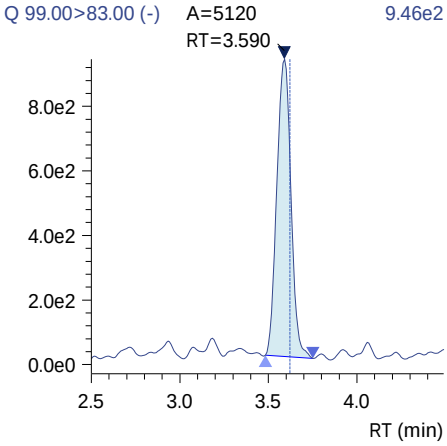
EQ2300381-03

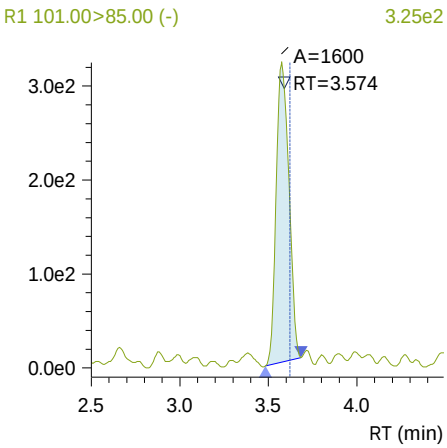
Sample ID: EQ2300381-03
Date Acquired: 8/9/2023 10:34:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-007.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	5120	340635	0.1019	ng/mL	101.00 >85.00	31.26	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3406 35	340635	1.0000	ng/mL	----	----	

Perchlorate

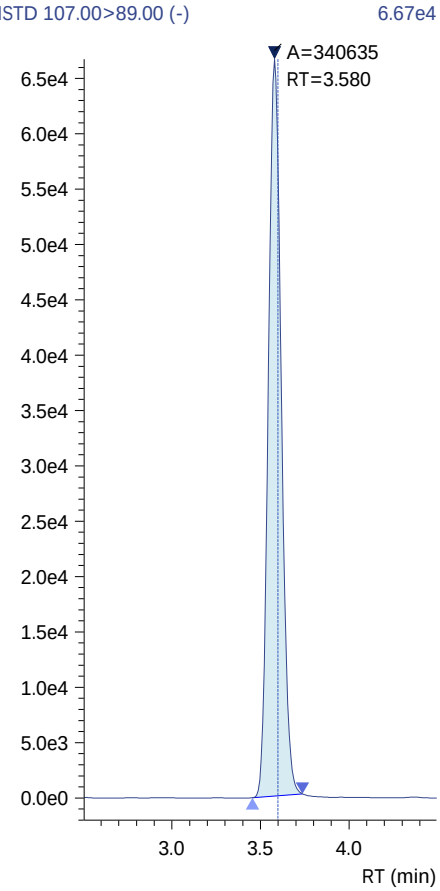
Conc 0.1019
R#1 31.26 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

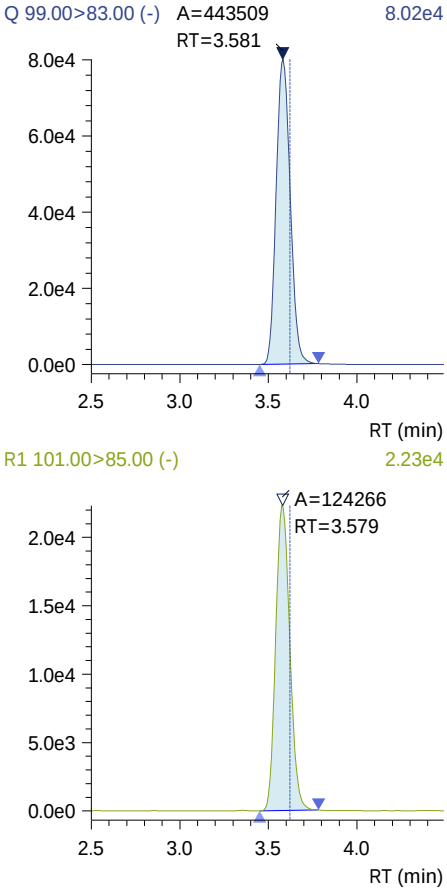
E2300708-001

Sample ID: E2300708-001
Date Acquired: 8/9/2023 11:14:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-013.lcd
Vial: 28 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.581	443509	326290	9.2176	ng/mL	101.00 >85.00	28.02	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.578	326290	326290	1.0000	ng/mL	----	----	

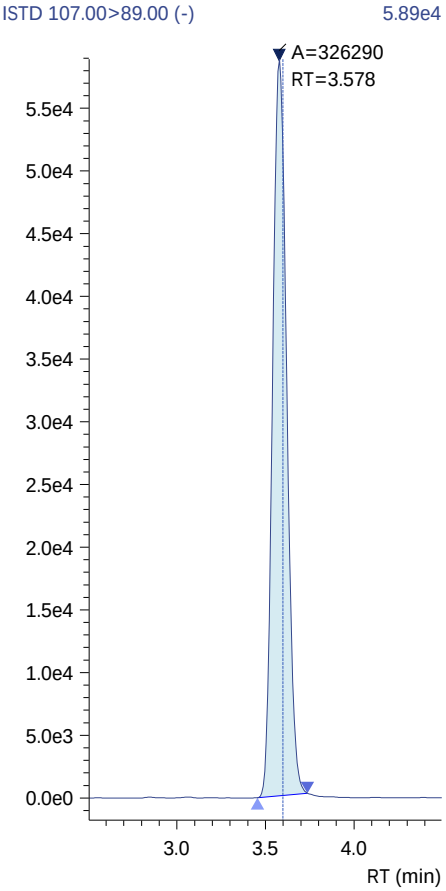
Perchlorate

Conc 9.2176
R#1 28.02 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

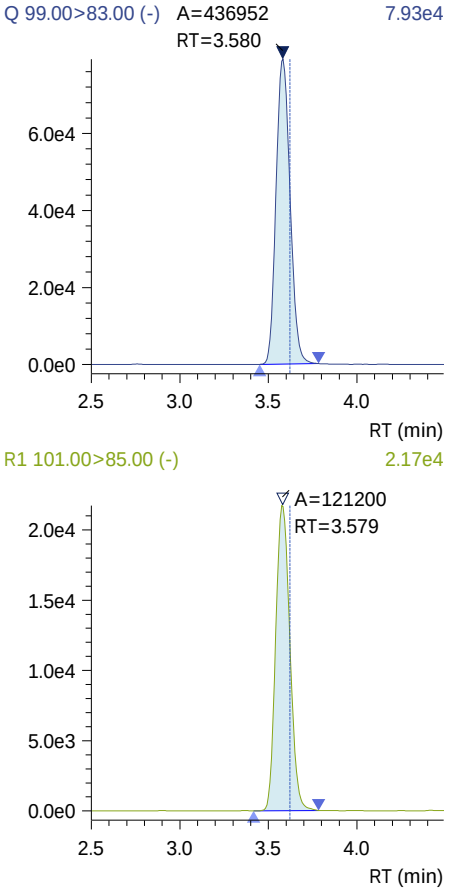
CCV

Sample ID: CCV
Date Acquired: 8/9/2023 11:25:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-015.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	436952	289217	10.2454	ng/mL	101.00 >85.00	27.74	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.577	289217	289217	1.0000	ng/mL	----	----	

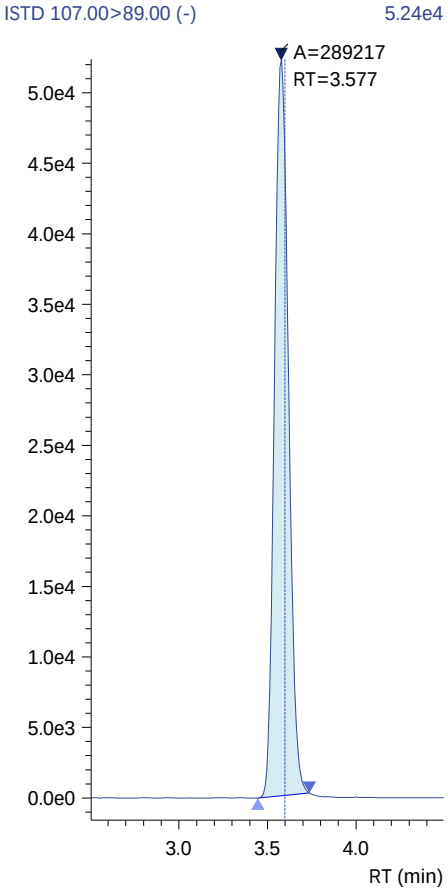
Perchlorate

Conc 10.2454
R#1 27.74 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23080102 Longhorn GW Treatment Plant
Monthly Influent Samples Cover Page

ALS WO# HS23080102

ALS Environmental
ALS Group USA, Corp
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Houston, TX 77099
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F : +1 281 530 5887
www.alsglobal.com

Table of Contents

HS23080102 Longhorn GW Treatment Plant Monthly Influent Samples Cover Page
- CoverPage
- HS23080102 Longhorn GW Treatment Plant Monthly Influent Samples Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - LH18/24-SP140_080123
  - Weight/Volume Log
  - Dates Report
  - QC
  - Acronyms
  - Certifications
  - SampleReceiptCheckList
  - COC
  - HS23080102-E2300709 Perchlorate Final Report II
- HS23080102 - ME - ICP_W_DOD
  - Form 11 - ICPMS05 Internal Standard Association
  - Form 13 - ICPMS05_443258 Run Log
  - Form 13 - ICPMS06_443328 Run Log
  - Form 2 - ICPMS05_443258 CCV
  - Form 2 - ICPMS06_443328 CCV
  - Form 3 - ICPMS05_443258 CCB

Table of Contents (continued)

- Form 3 - ICPMS06_443328 CCB
- Form 4 - ICPMS05_443258 ICSA
- Form 4 - ICPMS06_443328 ICSA
- Form 5A - ICPMS05_443258 MS
- Form 5B - ICPMS05_443258 PDS
- Form 7 - ICPMS05_443258 LCS
- Form 8 - ICPMS05_443258 SD

HS23080102 Wetchem Cr6_W

HS23080102-E2300709 Perchlorate Final Report IV

- CoverLetter
- Certificate of Analysis
- Chain of Custody
- Preparation Sheets
- Analytical Results
- Accuracy and Precision
- Initial Calibration
- Chromatograms and Selected Ion Monitoring

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Houston, TX 77099
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F: +1 281 530 5887
alsglobal.com

WorkOrder: HS23080102

Longhorn GW Treatment Plant Monthly Influent Samples

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

14-Aug-2023

HS23080102 Longhorn GW Treatment Plant
Monthly Influent Samples Final

ALS WO# HS23080102

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

August 12, 2023

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS23080102**

Laboratory Results for: **Longhorn GW Treatment Plant Monthly Influent Samples**

Dear Marcia Olive,

ALS Environmental received 1 sample(s) on Aug 02, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
Work Order: HS23080102

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23080102-01	LH18/24-SP140_080123	Water		01-Aug-2023 13:00	02-Aug-2023 09:30	☐

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: Longhorn GW Treatment Plant Monthly Influent Samples
Work Order: HS23080102

Work Order Comments

- The analysis for Perchlorate was subcontracted to ALS Houston High-Res Lab. Final report attached

Metals by Method SW6020A

Batch ID: 198597

Sample ID: HS23071878-02MSD

- MSD is for an unrelated sample

WetChemistry by Method SW7196

Batch ID: R443256

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc. **ANALYTICAL REPORT**

Project: Longhorn GW Treatment Plant Monthly Influent Samples WorkOrder:HS23080102

Sample ID: LH18/24-SP140_080123 Lab ID:HS23080102-01

Collection Date: 01-Aug-2023 13:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 04-Aug-2023		Analyst: MSC
Selenium	0.00250	U	0.00110	0.00250	0.00500	mg/L	1	05-Aug-2023 00:15
Silver	0.000500	U	0.000200	0.000500	0.00500	mg/L	1	05-Aug-2023 00:15
HEXAVALENT CHROMIUM BY SW7196A		**Method:SW7196**						Analyst: MZD
Chromium, Hexavalent	0.00600	U	0.00600	0.00600	0.0100	mg/L	1	02-Aug-2023 10:35
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: KR
Subcontract Analysis	See Attached		0	0		NA	1	10-Aug-2023 12:54

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Bhate Environmental Associates, Inc.

Project: Longhorn GW Treatment Plant Monthly Influent Samples

WorkOrder: HS23080102

Batch ID: 198597 **Start Date:** 04 Aug 2023 14:00 **End Date:** 04 Aug 2023 14:00

Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS23080102-01		10 (mL)	10 (mL)	1	120 plastic HNO3

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 198597 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Water	
HS23080102-01	LH18/24-SP140_080123	01 Aug 2023 13:00		04 Aug 2023 14:00	05 Aug 2023 00:15	1
Batch ID: R443256 (0)	**Test Name :** HEXAVALENT CHROMIUM BY SW7196A				**Matrix:** Water	
HS23080102-01	LH18/24-SP140_080123	01 Aug 2023 13:00			02 Aug 2023 10:35	1
Batch ID: R443669 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS23080102-01	LH18/24-SP140_080123	01 Aug 2023 13:00			10 Aug 2023 12:54	1

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

QC BATCH REPORT

Batch ID: 198597 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-198597** Units: **mg/L** Analysis Date: **07-Aug-2023 13:13**
Client ID: Run ID: **ICPMS06_443328** SeqNo: **7475858** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	0.00250	0.00500								U
Silver	0.000500	0.00500								U

LCS Sample ID: **LCS-198597** Units: **mg/L** Analysis Date: **04-Aug-2023 23:25**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474769** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	0.05016	0.00500	0.05	0	100	80 - 120				
Silver	0.04612	0.00500	0.05	0	92.2	85 - 116				

MS Sample ID: **HS23071878-02MS** Units: **mg/L** Analysis Date: **04-Aug-2023 23:32**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474772** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	0.05257	0.00500	0.05	0.000651	104	80 - 120				
Silver	0.04659	0.00500	0.05	0.000081	93.0	85 - 116				

MSD Sample ID: **HS23071878-02MSD** Units: **mg/L** Analysis Date: **04-Aug-2023 23:34**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474773** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	0.05662	0.00500	0.05	0.000651	112	80 - 120	0.05257	7.41	20	
Silver	0.04815	0.00500	0.05	0.000081	96.1	85 - 116	0.04659	3.31	20	

PDS Sample ID: **HS23071878-02PDS** Units: **mg/L** Analysis Date: **04-Aug-2023 23:36**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474774** PrepDate: **04-Aug-2023** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	0.1129	0.00500	0.1	0.000651	112	80 - 120				
Silver	0.08295	0.00500	0.1	0.000081	82.9	80 - 120				

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

QC BATCH REPORT

Batch ID: 198597 (0) **Instrument: ICPMS06** **Method: METALS BY ICPMS BY SW6020A**

SD Sample ID: **HS23071878-02SD** Units: **mg/L** Analysis Date: **04-Aug-2023 23:29**
Client ID: Run ID: **ICPMS05_443258** SeqNo: **7474771** PrepDate: **04-Aug-2023** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Selenium	0.0125	0.0250					0.000651	0	10	U
Silver	0.00250	0.0250					0.000081	0	10	U

The following samples were analyzed in this batch: HS23080102-01

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

QC BATCH REPORT

Batch ID: R443256 (0) **Instrument: UV-2450** **Method: HEXAVALENT CHROMIUM BY SW7196A**

MBLK Sample ID: **MBLK-R443256** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473720** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.00600	0.0100								U

LCS Sample ID: **LCS-R443256** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473719** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	0.236	0.0100	0.25	0	94.4	90 - 111				

MS Sample ID: **HS23080061-01MS** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473726** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	11.5	0.500	12.5	0	92.0	90 - 111				

MSD Sample ID: **HS23080061-01MSD** Units: **mg/L** Analysis Date: **02-Aug-2023 10:35**
Client ID: Run ID: **UV-2450_443256** SeqNo: **7473725** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium, Hexavalent	11.5	0.500	12.5	0	92.0	90 - 111	11.5	0	20	

The following samples were analyzed in this batch: HS23080102-01

ALS Houston, US Date: 12-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: **HS23080102**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087-2023	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 12-Aug-23

Sample Receipt Checklist

Work Order ID: HS23080102 **Date/Time Received:** 02-Aug-2023 09:30

Client Name: Bhate Environmental **Received by:** Corey Grandits

Completed By:	/S/ Corey Grandits	02-Aug-2023 10:56	**Reviewed by:**	/S/ James Guin	04-Aug-2023 08:37
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.7UC/3.6C	IR31	
Cooler(s)/Kit(s):	50654		
Date/Time sample(s) sent to storage:	8/2/23		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS, 10450 Stancliff Rd., Suite 210 Houston, TX. 77099 (281) 530-5656 ATTN: Ragen Gigi

Project: BHATE
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. JVPCIBH.0001

Job:
GROUNDWATER TREATMENT PLANT MONTHLY INFLUENT SAMPLES

Prepared By: Scott Beesinger

P.O. Number

HS23080102

Bhate Environmental Associates, Inc.
Longhorn GW Treatment Plant Monthly Influent Sam

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	SILVER & SELENIUM	HEXAVALENT CHROMIUM	PERCHLORATE								Remarks (Preservatives, etc.)	Lab I.D.#
LH18/24-SP140_080123	Water	08/01/23 / 13:00		1	X										HNO3	
LH18/24-SP140_080123	Water	08/01/23 / 13:00		2		X	X								NONE	

Additional Remarks: **STANDARD TURN AROUND TIME**

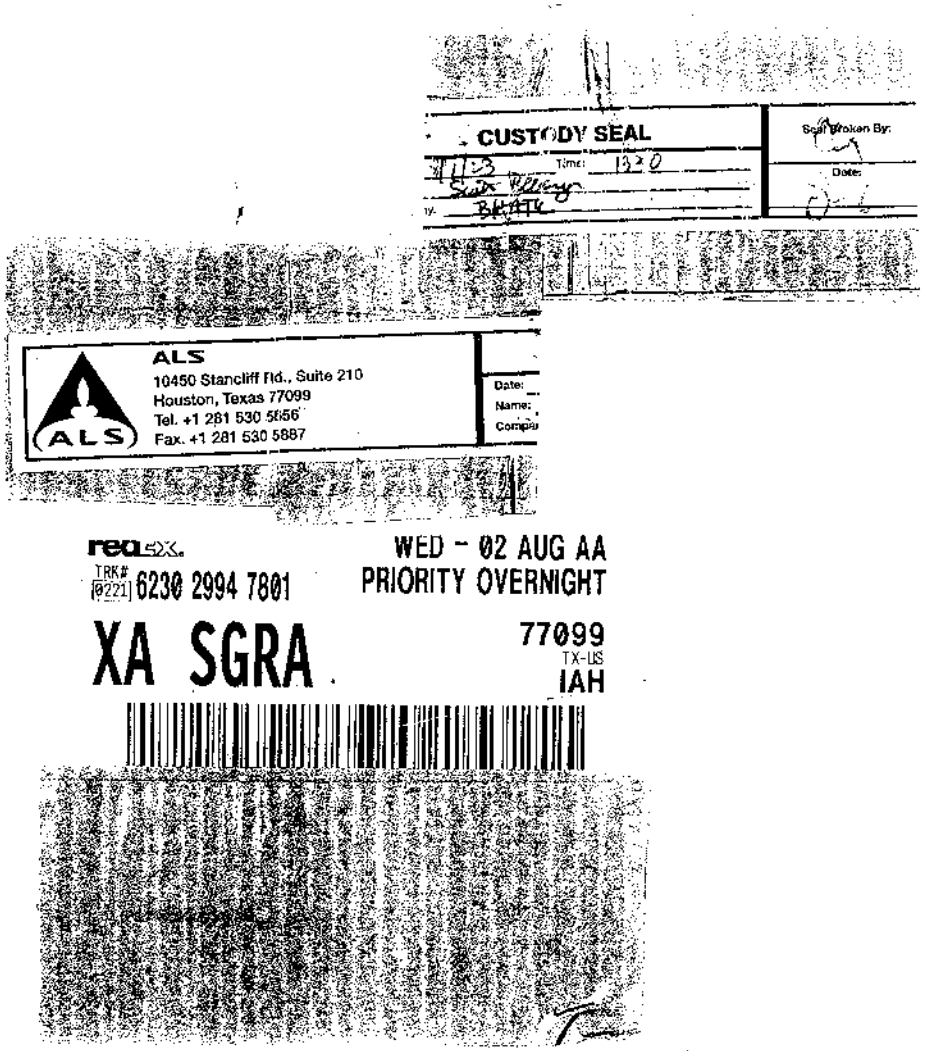
Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	08/01/23	13:30	CH	8-2-23	0930						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks: 3.7° 10231 50644

(Word) S:\1-ces\Forms\Chain of Custody - BiWeekly


CUSTODY SEAL
Time: 1320
Seal Broken By:
Date:
ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
Date:
Name:
fedex
TRK# 0221 6230 2994 7801
WED - 02 AUG AA
PRIORITY OVERNIGHT
XA SGRA
77099
TX-US
IAH

August 09, 2023 Service Request No:E2300709

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080102

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 02, 2023
For your reference, these analyses have been assigned our service request number **E2300709.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300709
Project:	HS23080102	**Date Received:**	08/02/23
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt.

One sample was received for analysis at ALS Environmental in Houston on 08/02/23.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300381: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300709
Project: HS23080102

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300709-001	LH18/24-SP140_080123	8/1/2023	1300

Service Request Summary

Folder #: **E2300709**
Client Name: ALS Environmental - US
Project Name: HS23080102
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080102
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300709-001	LH18/24-SP140_080123	Water	08/01/23 1300	IV

Service Request Summary

Folder #: **E2300709**
Client Name: ALS Environmental - US
Project Name: HS23080102
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080102
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22576

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080102
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080102-01**	**LH18/24-SP140_080123**	**Water**	**01 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			09 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: NP Date/Time:

Received By: Date/Time: 8-2-23 1043

Cooler ID(s): Temperature(s):

ALS Environmental

Cooler Receipt Form

Project Chemist JH

Client/Project ALS

Thermometer ID 1231

Date/Time Received: 8-2-23 Initials: LJ

Date/Time Logged in: 8.2.23 Initials LJ

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ☒ ALS Courier ○ Client

2. Samples received in: ☒ Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ☒ No If yes, how many and where?

Were they intact? ○ Yes ○ No ☒ N/A

Were they signed and dated? ○ Yes ○ No ☒ N/A

4. Packing Material: ○ Inserts ☒ Baggies ○ Bubble Wrap ○ Gel Packs ☒ Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-2-23	1049	LJ	9.2	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ○ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ○ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ○ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ○ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300708-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2300709-001	LH18/24-SP140_080123	.01	6850/ClO4 DOD			Water	10mL	
3	E2300711-001	04WW09_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300711-002	04WW10_080123	.02	6850/ClO4 DOD			Ground Water	10mL	
5	E2300711-003	04WW05_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300711-004	04WW11_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300711-005	04WW07_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300711-006	04WW07_080123_a	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300711-007	04WW04_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300711-008	04WW01_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300716-001	1824DPTMW07_080223	.01	6850/ClO4 DOD			Water	10mL	
12	E2300718-001	LH18/24-SP650_080823_Between IX	.01	6850/ClO4 DOD			Water	10mL	
13	E2300718-002	LH18/24-SP650_080823_AIX	.01	6850/ClO4 DOD			Water	10mL	
14	E2300718-003	LH18/24-SP650_080823_BIX	.01	6850/ClO4 DOD			Water	10mL	
15	EQ2300381-01	MB		6850/ClO4			Liquid	10mL	
16	EQ2300381-02	LCS		6850/ClO4			Liquid	10mL	
17	EQ2300381-03	DLCS		6850/ClO4			Liquid	10mL	
18	EQ2300381-04	04WW10_080123 MS	.02	6850/ClO4 DOD			Liquid	10mL	
19	EQ2300381-05	04WW10_080123 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
20	K2308781-001	LGAC-INF-080723	.01	6850/ClO4			Water	10mL	
21	K2308781-002	LGAC-INT1-080723	.01	6850/ClO4			Water	10mL	
22	K2308781-003	LGAC-INT2-080723	.01	6850/ClO4			Water	10mL	
23	R2306562-017	2307210621 PFE-1	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300381-02	1.00µL	EQ2300381-02	1.00µL	EQ2300381-03	1.00µL	EQ2300381-03	1.00µL	EQ2300381-04	1.00µL	EQ2300381-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300708-001	100.00µL	E2300709-001	100.00µL	E2300711-001	100.00µL	E2300711-002	100.00µL	E2300711-003	100.00µL	E2300711-004	100.00µL
E2300711-005	100.00µL	E2300711-006	100.00µL	E2300711-007	100.00µL	E2300711-008	100.00µL	E2300716-001	100.00µL	E2300718-001	100.00µL
E2300718-002	100.00µL	E2300718-003	100.00µL	EQ2300381-01	100.00µL	EQ2300381-01	100.00µL	EQ2300381-02	100.00µL	EQ2300381-02	100.00µL
EQ2300381-03	100.00µL	EQ2300381-03	100.00µL	EQ2300381-04	100.00µL	EQ2300381-05	100.00µL	K2308781-001	100.00µL	K2308781-002	100.00µL
K2308781-003	100.00µL	R2306562-017	100.00µL								

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/9/23 09:01
Finished: 8/9/23 09:53
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP140_080123	**Units:**	µg/L
Lab Code:	E2300709-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**17200**		100	50.0	25.0	1000	8/ 9/23	8/9/23 11:19	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300381-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:23	424245	813305	

Accuracy & Precision

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080102
Sample Matrix: Water

Service Request: E2300709
Date Analyzed: 8/ 9/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424245

	Lab Control Sample EQ2300381-02			Duplicate Lab Control Sample EQ2300381-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.102	0.100	102	84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:34	424245	813305	

HS23080102 - ME - ICP_W_DOD

ALS WO# HS23080102

ALS Houston, US

Date: 09-Aug-23

Form 11 - INTERNAL STANDARD ASSOCIATION

Client: Bhate Environmental Associates, Inc.

Instrument:ICPMS05

Project: Longhorn GW Treatment Plant Monthly Influent Samples

WorkOrder: HS23080102

Mass	Analyte	Assoc Int Standard 1	Assoc Int Standard 2	Mode
9	Beryllium	Lithium		Ar
11	Boron	Lithium		Ar
23	Sodium	Germanium		ArHe
24	Magnesium	Germanium		ArHe
27	Aluminum	Germanium		ArHe
39	Potassium	Germanium		ArHe
44	Calcium	Germanium		Ar
47	Titanium	Germanium		Ar
51	Vanadium	Germanium		ArHe
52	Chromium	Germanium		ArHe
55	Manganese	Germanium		ArHe
56	Iron	Germanium		ArHe
59	Cobalt	Germanium		ArHe
60	Nickel	Germanium		ArHe
63	Copper	Germanium		ArHe
66	Zinc	Germanium		ArHe
75	Arsenic	Germanium		ArHe
82	Selenium	Germanium		Ar
88	Strontium	Indium		Ar
95	Molybdenum	Indium		Ar
105	Palladium	Germanium		Ar
107	Silver	Indium		Ar
114	Cadmium	Indium		Ar
118	Tin	Indium		Ar
121	Antimony	Germanium		ArHe
137	Barium	Indium		Ar
205	Thallium	Bismuth		Ar
208	Lead	Bismuth		Ar

ALS Houston, US Date: 09-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102
Start Date: 04-Aug-2023 End Date: 05-Aug-2023

Run ID:ICPMS05_443258
Instrument:ICPMS05
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS05_443258_Tune	1	04-Aug-2023 00:00	ICPMS05_443258_Tune_1	
CAL BLK	1	04-Aug-2023 10:35	014CALB.d_7473776	AG SE
2/10/200	1	04-Aug-2023 10:37	015CALS.d_7473777	AG SE
5/25/500	1	04-Aug-2023 10:39	016CALS.d_7473778	AG SE
10/50/1000	1	04-Aug-2023 10:41	017CALS.d_7473779	AG SE
100/500/10K	1	04-Aug-2023 10:43	018CALS.d_7473780	AG SE
200/1000/20K	1	04-Aug-2023 10:45	019CALS.d_7473781	AG SE
ICV	1	04-Aug-2023 10:53	021_ICV.d_7473783	AG SE
LLICV2	1	04-Aug-2023 10:57	023LCV2.d_7473785	AG SE
LLICV5	1	04-Aug-2023 10:59	024LCV5.d_7473786	AG SE
ICB	1	04-Aug-2023 11:04	026_ICB.d_7473788	AG SE
ICSA	1	04-Aug-2023 11:11	028ICSA.d_7473790	AG SE
ICSAB	1	04-Aug-2023 11:13	029ICSB.d_7473791	AG SE
CAL BLK	1	04-Aug-2023 21:40	267CALB.d_7474722	AG SE
2/10/200	1	04-Aug-2023 21:42	268CALS.d_7474723	AG SE
5/25/500	1	04-Aug-2023 21:44	269CALS.d_7474724	AG SE
10/50/1000	1	04-Aug-2023 21:46	270CALS.d_7474725	AG SE
100/500/10K	1	04-Aug-2023 21:49	271CALS.d_7474726	AG SE
200/1000/20K	1	04-Aug-2023 21:51	272CALS.d_7474727	AG SE
LLICCV2	1	04-Aug-2023 21:57	275LCV2.d_7474729	AG SE
LLICCV5	1	04-Aug-2023 21:59	276LCV5.d_7474730	AG SE
ICV	1	04-Aug-2023 22:01	277_ICV.d_7474720	AG SE
ICCB 1	1	04-Aug-2023 22:03	278_ICB.d_7474721	AG SE
CCV 1	1	04-Aug-2023 22:08	280_CCV.d_7474732	AG SE
CCB 2	1	04-Aug-2023 22:10	281_CCB.d_7474733	AG SE
CCV 2	1	04-Aug-2023 22:26	289_CCV.d_7474741	AG SE
CCB 3	1	04-Aug-2023 22:28	290_CCB.d_7474742	AG SE
CCV 3	1	04-Aug-2023 22:41	296_CCV.d_7474748	AG SE
CCB 4	1	04-Aug-2023 22:43	297_CCB.d_7474749	AG SE
CCV 4	1	04-Aug-2023 22:57	304_CCV.d_7474756	AG SE
CCB 5	1	04-Aug-2023 23:00	305_CCB.d_7474757	AG SE
CCV 5	1	04-Aug-2023 23:19	314_CCV.d_7474766	AG SE
CCB 6	1	04-Aug-2023 23:21	315_CCB.d_7474767	AG SE
LCS-198597	1	04-Aug-2023 23:25	317SMPL.d_7474769	AG SE
ZZZZZZSD	5	04-Aug-2023 23:29	319SMPL.d_7474771	AG SE
ZZZZZZMS	1	04-Aug-2023 23:32	320SMPL.d_7474772	AG SE
ZZZZZZMSD	1	04-Aug-2023 23:34	321SMPL.d_7474773	AG SE
ZZZZZZPDS	1	04-Aug-2023 23:36	322SMPL.d_7474774	AG SE
CCV 6	1	04-Aug-2023 23:38	323_CCV.d_7474775	AG SE
CCB 7	1	04-Aug-2023 23:40	324_CCB.d_7474776	AG SE
CCV 7	1	04-Aug-2023 23:57	332_CCV.d_7474784	AG SE
CCB 8	1	05-Aug-2023 00:00	333_CCB.d_7474785	AG SE
LH18/24-SP140_080123	1	05-Aug-2023 00:15	340SMPL.d_7474792	AG SE
CCV 8	1	05-Aug-2023 00:24	344_CCV.d_7474796	AG SE
CCB 9	1	05-Aug-2023 00:26	345_CCB.d_7474797	AG SE
CCV 9	1	05-Aug-2023 00:28	346_CCV.d_7474798	AG SE
CCB 10	1	05-Aug-2023 00:31	347_CCB.d_7474799	AG SE
LLICV2	1	05-Aug-2023 00:35	349LCV2.d_7474801	AG SE
LLICV5	1	05-Aug-2023 00:37	350LCV5.d_7474802	AG SE
ICSA	1	05-Aug-2023 00:40	351ICSA.d_7474803	AG SE

ALS Houston, US

Date: 09-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102
Start Date: 04-Aug-2023 End Date: 05-Aug-2023

Run ID:ICPMS05_443258
Instrument:ICPMS05
Method:

Sample No.	D/F	Time	FileID	Analytes
ICSAB	1	05-Aug-2023 00:42	352ICSB.d_7474804	AG SE

ALS Houston, US Date: 09-Aug-23

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102
Start Date: 07-Aug-2023 End Date: 07-Aug-2023

Run ID:ICPMS06_443328
Instrument:ICPMS06
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS06_443328_Tune	1	07-Aug-2023 00:00	ICPMS06_443328_Tune_1	
CAL BLK	1	07-Aug-2023 12:22	015CALB.d_7475813	AG SE
2/10/200	1	07-Aug-2023 12:24	016CALS.d_7475814	AG SE
5/25/500	1	07-Aug-2023 12:26	017CALS.d_7475815	AG SE
10/50/100	1	07-Aug-2023 12:28	018CALS.d_7475816	AG SE
100/500/10K	1	07-Aug-2023 12:30	019CALS.d_7475817	AG SE
200/1000/20K	1	07-Aug-2023 12:32	020CALS.d_7475818	AG SE
LLICV2	1	07-Aug-2023 12:48	024LCV2.d_7475822	AG SE
LLICV5	1	07-Aug-2023 12:50	025LCV5.d_7475823	AG SE
ICB	1	07-Aug-2023 12:51	026_ICB.d_7475824	AG SE
ICV	1	07-Aug-2023 12:53	027_ICV.d_7475825	AG SE
ICSA	1	07-Aug-2023 12:59	029ICSA.d_7475841	AG SE
ICSAB	1	07-Aug-2023 13:01	030ICSB.d_7475839	AG SE
CCV 1	1	07-Aug-2023 13:09	033_CCV.d_7475856	AG SE
CCB 1	1	07-Aug-2023 13:10	034_CCB.d_7475857	AG SE
MBLK-198597	1	07-Aug-2023 13:13	035SMPL.d_7475858	AG SE
LCS-198597	1	07-Aug-2023 13:15	036SMPL.d_7475859	
ZZZZZZSD	5	07-Aug-2023 13:19	038SMPL.d_7475861	
ZZZZZZMS	1	07-Aug-2023 13:21	039SMPL.d_7475862	
ZZZZZZMSD	1	07-Aug-2023 13:23	040SMPL.d_7475863	
ZZZZZZPDS	1	07-Aug-2023 13:25	041SMPL.d_7475864	
CCV 2	1	07-Aug-2023 13:31	044_CCV.d_7475867	AG SE
CCB 2	1	07-Aug-2023 13:33	045_CCB.d_7475868	AG SE

ALS Houston, US Date: 09-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

ICV Date: 04-Aug-2023 10:53 Seq: 7473783 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	100.984	101	90-110	
Silver	100	101.501	102	90-110	

ICV Date: 04-Aug-2023 22:01 Seq: 7474720 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	102.481	102	90-110	
Silver	100	101.903	102	90-110	

CCV1 Date: 04-Aug-2023 22:08 Seq: 7474732 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	105.359	105	90-110	
Silver	100	117.862	118	90-110	S

CCV2 Date: 04-Aug-2023 22:26 Seq: 7474741 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	104.354	104	90-110	
Silver	100	118.865	119	90-110	S

CCV3 Date: 04-Aug-2023 22:41 Seq: 7474748 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	103.269	103	90-110	
Silver	100	117.5	118	90-110	S

CCV4 Date: 04-Aug-2023 22:57 Seq: 7474756 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	102.829	103	90-110	
Silver	100	116.306	116	90-110	S

CCV5 Date: 04-Aug-2023 23:19 Seq: 7474766 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	101.975	102	90-110	
Silver	100	100.684	101	90-110	

CCV6 Date: 04-Aug-2023 23:38 Seq: 7474775 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	104.994	105	90-110	
Silver	100	100.2	100	90-110	

CCV7 Date: 04-Aug-2023 23:57 Seq: 7474784 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	102.189	102	90-110	
Silver	100	99.146	99	90-110	

CCV8 Date: 05-Aug-2023 00:24 Seq: 7474796 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	100.71	101	90-110	
Silver	100	99.899	100	90-110	

CCV9 Date: 05-Aug-2023 00:28 Seq: 7474798 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	100.88	101	90-110	
Silver	100	99.52	100	90-110	

ALS Houston, US Date: 09-Aug-23

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Run ID: ICPMS06_443328
Instrument: ICPMS06
Method: SW6020A

ICV Date: 07-Aug-2023 12:53 Seq: 7475825 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	101.591	102	90-110	
Silver	100	99.891	100	90-110	

CCV1 Date: 07-Aug-2023 13:09 Seq: 7475856 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	100.109	100	90-110	
Silver	100	99.066	99	90-110	

CCV2 Date: 07-Aug-2023 13:31 Seq: 7475867 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Selenium	100	94.892	95	90-110	
Silver	100	98.727	99	90-110	

ALS Houston, US Date: 09-Aug-23

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

ICB	Date: 04-Aug-2023 11:04	Seq: 7473788	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	5	1.1	5	U
Silver	5	0.2	5	U

ICCB1	Date: 04-Aug-2023 22:03	Seq: 7474721	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	5	1.1	5	U
Silver	5	0.2	5	U

CCB2	Date: 04-Aug-2023 22:10	Seq: 7474733	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB3	Date: 04-Aug-2023 22:28	Seq: 7474742	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB4	Date: 04-Aug-2023 22:43	Seq: 7474749	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB5	Date: 04-Aug-2023 23:00	Seq: 7474757	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB6	Date: 04-Aug-2023 23:21	Seq: 7474767	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB7	Date: 04-Aug-2023 23:40	Seq: 7474776	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB8	Date: 05-Aug-2023 00:00	Seq: 7474785	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB9	Date: 05-Aug-2023 00:26	Seq: 7474797	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

CCB10	Date: 05-Aug-2023 00:31	Seq: 7474799	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**
Selenium	2	1.1	2	U
Silver	2	0.2	2	U

ALS Houston, US

Date: 09-Aug-23

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Run ID: ICPMS06_443328
Instrument: ICPMS06
Method: SW6020A

ICB	Date: 07-Aug-2023 12:51		Seq: 7475824	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	

CCB1	Date: 07-Aug-2023 13:10		Seq: 7475857	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

MBLK-198597	Date: 07-Aug-2023 13:13		Seq: 7475858	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Selenium	5	1.1	5	U	
Silver	5	0.2	5	U	

CCB2	Date: 07-Aug-2023 13:33		Seq: 7475868	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Selenium	2	1.1	2	U	
Silver	2	0.2	2	U	

ALS Houston, US

Date: 09-Aug-23

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Run ID: ICPMS05_443258
Instrument: ICPMS05
Method: SW6020A

ICSA	Date: 04-Aug-2023 11:11	Seq: 7473790	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Selenium		0.06	0	
Silver		0.191	0	
ICSAB	Date: 04-Aug-2023 11:13	Seq: 7473791	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Selenium	100	106.5	107	
Silver	100	99.5	99.5	
ICSA	Date: 05-Aug-2023 00:40	Seq: 7474803	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Selenium		0.095	0	
Silver		0.163	0	
ICSAB	Date: 05-Aug-2023 00:42	Seq: 7474804	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Selenium	100	102.6	103	
Silver	100	94.98	95.0	

ALS Houston, US

Date: 09-Aug-23

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Run ID: ICPMS06_443328
Instrument: ICPMS06
Method: SW6020A

ICSAB	Date: 07-Aug-2023 13:01	Seq: 7475839	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Selenium	100	103.3	103	
Silver	100	96.54	96.5	

ICSA	Date: 07-Aug-2023 12:59	Seq: 7475841	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Selenium		-0.09	0	
Silver		0.175	0	

ALS Houston, US Date: 09-Aug-23

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Date Analyzed: 04-Aug-2023 23:34
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Matrix Spike: HS23071878-02MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Selenium	5.000	52.57	50.00	104	56.62	50.00	112	80-120	7.41	20
Silver	5.000	46.59	50.00	93.0	48.15	50.00	96.1	85-116	3.31	20

ALS Houston, US

Date: 09-Aug-23

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Date Analyzed: 04-Aug-2023 23:36
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Lab Sample ID: HS23071878-02PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Selenium	0	112.9	100	112	80-120
Silver	0	82.95	100	83	80-120

ALS Houston, US

Date: 09-Aug-23

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Date Analyzed: 04-Aug-2023 23:25
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Lab Sample ID: LCS-198597
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Selenium	50	50.16	100	80-120
Silver	50	46.12	92	85-116

ALS Houston, US

Date: 09-Aug-23

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Monthly Influent Samples
WorkOrder: HS23080102

Date Analyzed: 04-Aug-2023 23:29
Date Extracted: 04-Aug-2023 14:00
Units: ug/L

Lab Sample ID: HS23071878-02SD
Client Sample ID:

Analysis Method: SW6020A

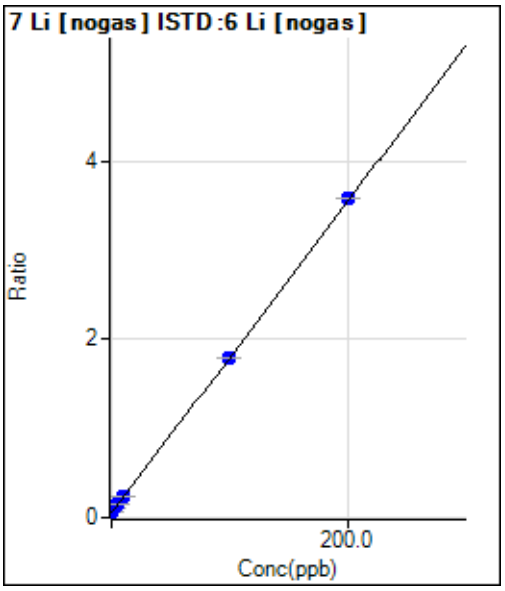
Analyte	Sample Result	C	SD Result	C	RPD	Q
Selenium	0	U	0	U	0	
Silver	0	U	0	U	0	

Calibration for 277_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 10:02:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	267CALB.d	CAL BLK	8/4/2023 9:40:48 PM
2	268CALS.d	2/10/200	8/4/2023 9:42:51 PM
3	269CALS.d	5/25/500	8/4/2023 9:44:54 PM
4	270CALS.d	10/50/1000	8/4/2023 9:46:58 PM
5	271CALS.d	100/500/10K	8/4/2023 9:49:02 PM
6	272CALS.d	200/1000/20K	8/4/2023 9:51:05 PM
7			

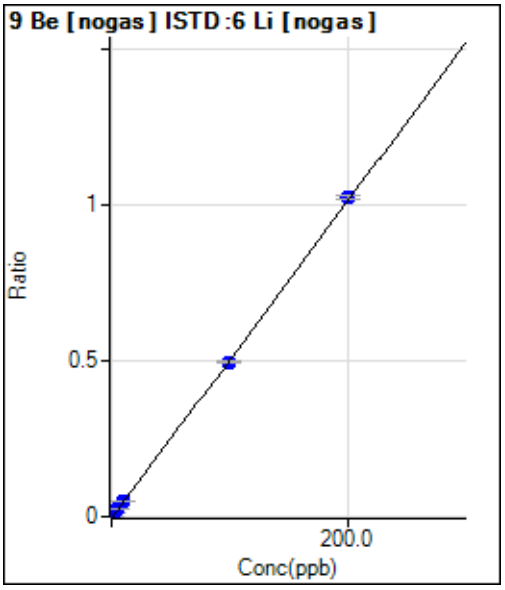
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	72235.98	0.0709	P	1.4	
2	☐	2.000	1.919	106105.85	0.1044	P	0.9	-4.0
3	☐	5.000	4.642	154599.31	0.1520	P	0.6	-7.2
4	☐	10.000	9.363	238160.22	0.2346	P	0.3	-6.4
5	☐	100.000	98.271	1746894.61	1.7887	P	0.6	-1.7
6	☐	200.000	200.906	3321127.45	3.5829	P	0.5	0.5
7	☐	1.000						

y = 0.0175 * x + 0.0709
R = 0.9999
DL = 0.1646 ppb
BEC = 4.055 ppb

Weight: <None>
Min Conc: <None>

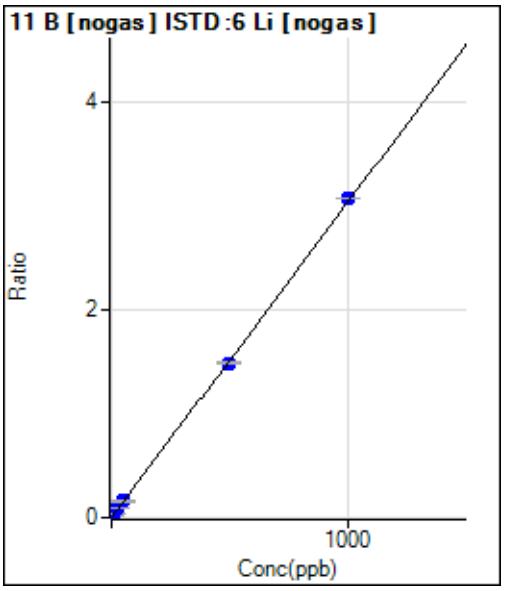


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	31.67	0.0000	P	8.8	
2	☐	2.000	1.869	9704.77	0.0096	P	1.1	-6.6
3	☐	5.000	4.606	23888.41	0.0235	P	1.8	-7.9
4	☐	10.000	9.246	47856.46	0.0471	P	0.8	-7.5
5	☐	100.000	97.462	484890.70	0.4965	P	0.9	-2.5
6	☐	200.000	201.318	950659.07	1.0256	P	0.6	0.7
7	☐	1.000						

y = 0.0051 * x + 3.1065E-005
R = 0.9999
DL = 0.00161 ppb
BEC = 0.006098 ppb

Weight: <None>
Min Conc: <None>

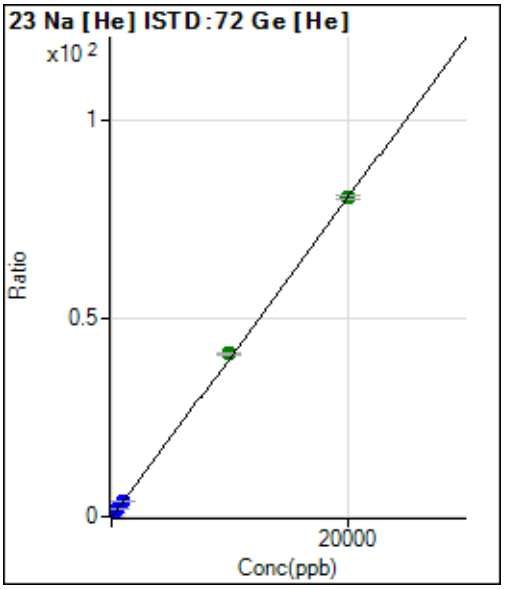
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18929.94	0.0186	P	1.3	
2	☐	10.000	8.988	46577.79	0.0458	P	1.2	-10.1
3	☐	25.000	22.445	88127.75	0.0867	P	1.4	-10.2
4	☐	50.000	45.899	160234.73	0.1578	P	1.0	-8.2
5	☐	500.000	484.585	1453897.95	1.4886	P	1.6	-3.1
6	☐	1000.000	1007.986	2851901.42	3.0765	P	0.5	0.8
7	☐	5.000						

y = 0.0030 * x + 0.0186
R = 0.9998
DL = 0.2406 ppb
BEC = 6.123 ppb

Weight: <None>
Min Conc: <None>

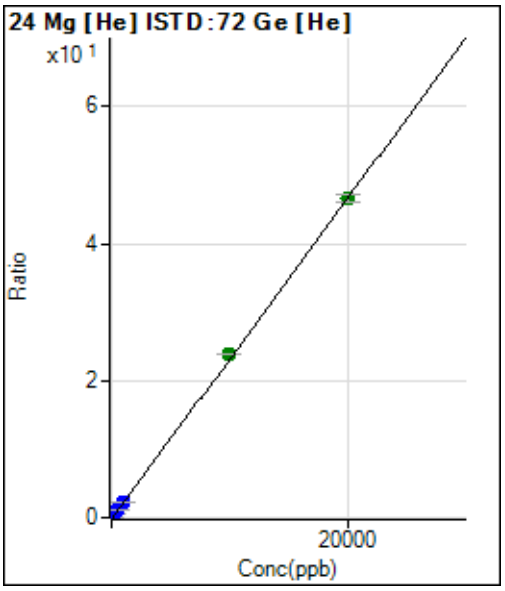


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43989.63	0.0948	P	1.3	
2	☐	200.000	193.057	408418.26	0.8747	P	0.6	-3.5
3	☐	500.000	473.326	942210.51	2.0070	P	0.4	-5.3
4	☐	1000.000	937.750	1856720.28	3.8832	P	0.3	-6.2
5	☐	10000.00	10151.19	19815026.37	41.1051	A	1.5	1.5
6	☐	20000.00	19928.24	38875996.92	80.6038	A	0.6	-0.4
7	☐	100.000						

y = 0.0040 * x + 0.0948
R = 1.0000
DL = 0.9354 ppb
BEC = 23.46 ppb

Weight: <None>
Min Conc: <None>

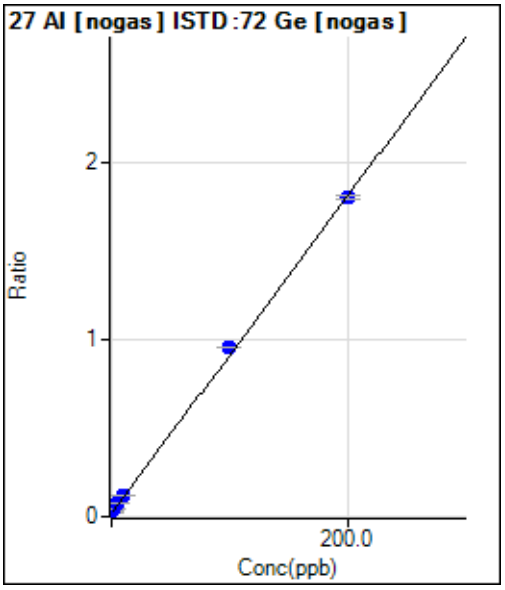
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	666.69	0.0014	P	9.7	
2	☐	200.000	191.582	210274.94	0.4503	P	0.7	-4.2
3	☐	500.000	469.657	517288.72	1.1019	P	0.7	-6.1
4	☐	1000.000	926.985	1039198.19	2.1735	P	0.9	-7.3
5	☐	10000.00	10216.08	11541071.50	23.9390	A	0.5	2.2
6	☐	20000.00	19896.45	22486236.33	46.6214	A	1.9	-0.5
7	☐	100.000						

y = 0.0023 * x + 0.0014
R = 0.9999
DL = 0.1787 ppb
BEC = 0.6126 ppb

Weight: <None>
Min Conc: <None>

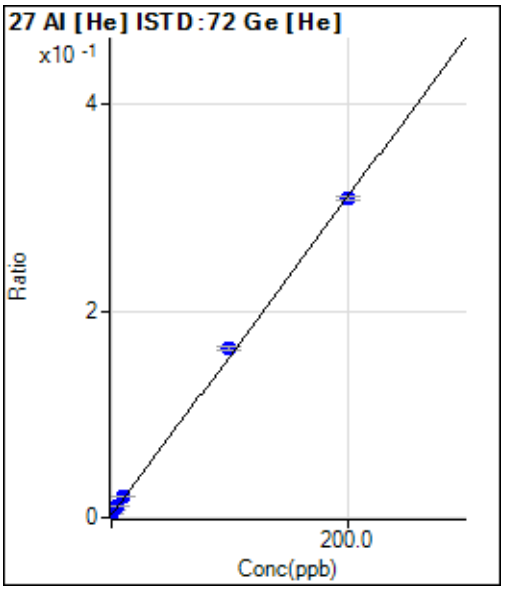


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	34089.35	0.0275	P	19.	
2	☐	2.000	1.840	54747.42	0.0439	P	1.2	-8.0
3	☐	5.000	4.969	89700.38	0.0719	P	1.2	-0.6
4	☐	10.000	10.446	151987.49	0.1210	P	1.6	4.5
5	☐	100.000	103.771	1247283.55	0.9565	P	0.2	3.8
6	☐	200.000	198.095	2337278.40	1.8009	P	1.5	-1.0
7	☐	1.000						

y = 0.0090 * x + 0.0275
R = 0.9997
DL = 1.809 ppb
BEC = 3.068 ppb

Weight: <None>
Min Conc: <None>

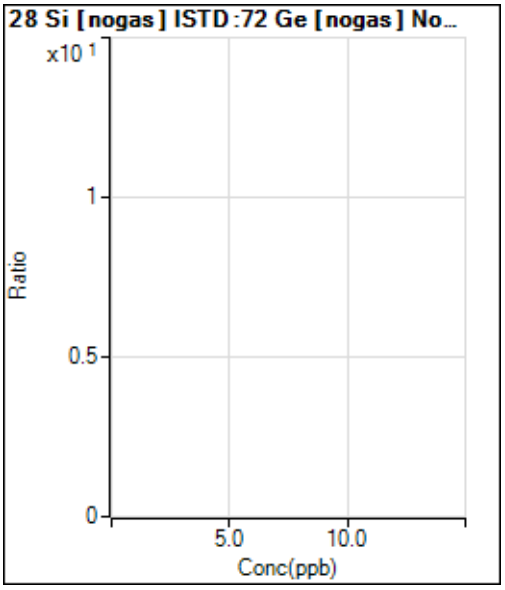
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1876.82	0.0040	P	12.	
2	☐	2.000	2.297	3543.80	0.0076	P	7.0	14.8
3	☐	5.000	4.808	5381.03	0.0115	P	1.8	-3.8
4	☐	10.000	10.886	9963.37	0.0208	P	2.1	8.9
5	☐	100.000	104.019	79287.91	0.1645	P	1.9	4.0
6	☐	200.000	197.948	149201.20	0.3094	P	1.0	-1.0
7	☐	1.000						

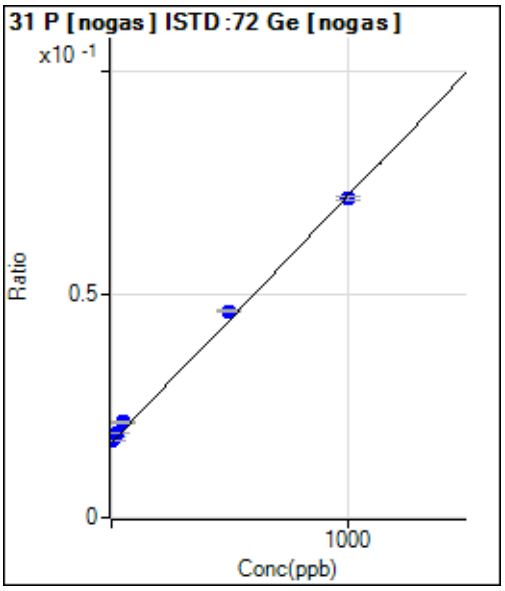
y = 0.0015 * x + 0.0040
R = 0.9997
DL = 0.9773 ppb
BEC = 2.623 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

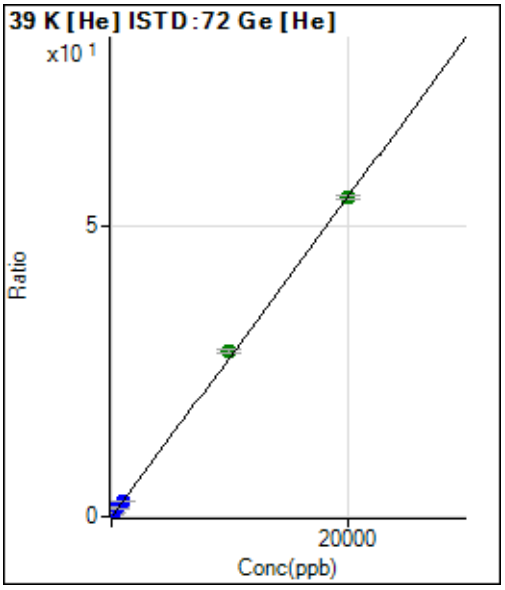
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21381.88	0.0172	P	2.0	
2	☐	10.000	9.396	22082.86	0.0177	P	4.8	-6.0
3	☐	25.000	31.006	23588.51	0.0189	P	1.6	24.0
4	☐	50.000	75.878	26882.01	0.0214	P	0.7	51.8
5	☐	500.000	527.136	60345.60	0.0463	P	0.6	5.4
6	☐	1000.000	984.994	92850.21	0.0715	P	0.9	-1.5
7	☐	5.000						

y = 5.5150E-005 * x + 0.0172
R = 0.9993
DL = 18.51 ppb
BEC = 312.1 ppb

Weight: <None>
Min Conc: <None>

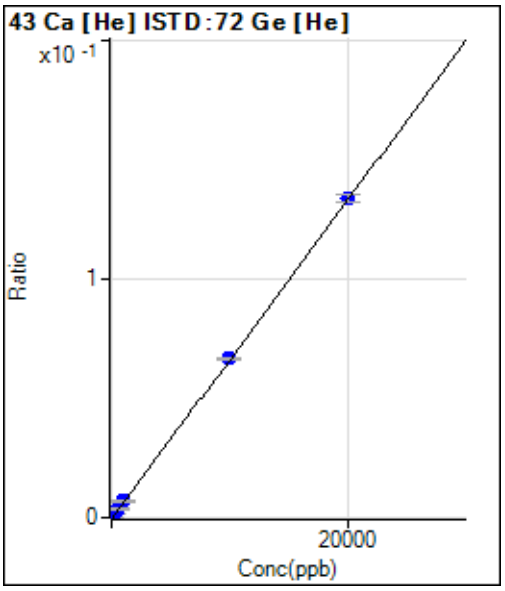


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	111020.85	0.2392	P	1.1	
2	☐	200.000	185.557	350613.16	0.7509	P	0.1	-7.2
3	☐	500.000	455.367	701825.12	1.4950	P	0.7	-8.9
4	☐	1000.000	895.879	1295594.95	2.7098	P	1.2	-10.4
5	☐	10000.00	10242.56	13731372.71	28.4851	A	1.8	2.4
6	☐	20000.00	19885.18	26563005.44	55.0766	A	1.2	-0.6
7	☐	100.000						

y = 0.0028 * x + 0.2392
R = 0.9999
DL = 2.878 ppb
BEC = 86.74 ppb

Weight: <None>
Min Conc: <None>

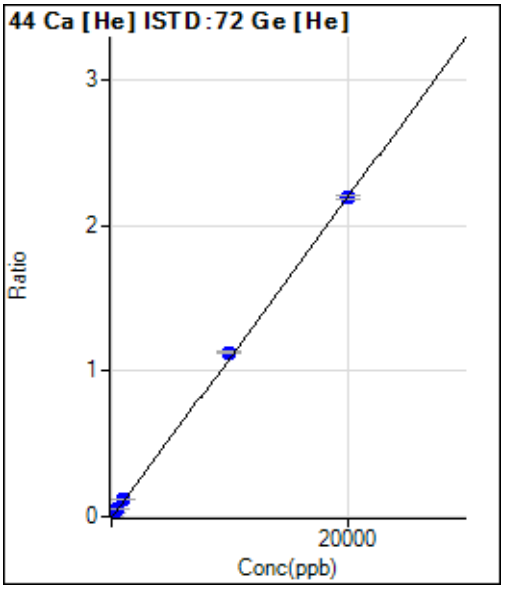
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	45.	
2	☐	200.000	208.819	686.69	0.0015	P	7.1	4.4
3	☐	500.000	525.573	1686.79	0.0036	P	4.1	5.1
4	☐	1000.000	1028.916	3330.43	0.0070	P	4.4	2.9
5	☐	10000.00	9985.817	32288.12	0.0670	P	1.1	-0.1
6	☐	20000.00	20004.91	64680.77	0.1341	P	2.6	0.0
7	☐	100.000						

y = 6.6998E-006 * x + 7.1641E-005
R = 1.0000
DL = 14.49 ppb
BEC = 10.69 ppb

Weight: <None>
Min Conc: <None>

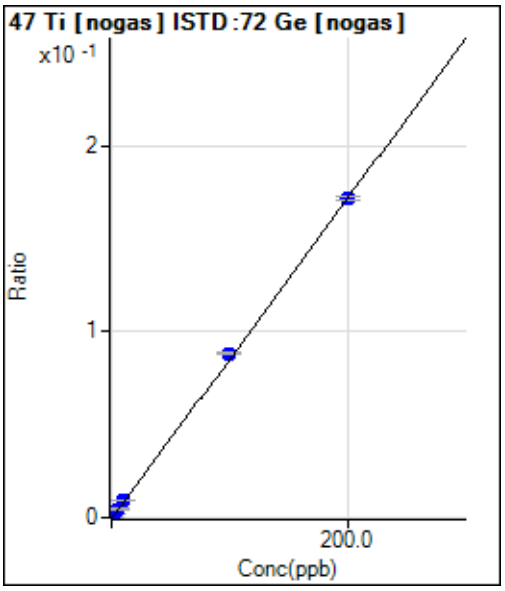


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0017	P	2.7	
2	☐	200.000	207.646	11494.56	0.0246	P	2.2	3.8
3	☐	500.000	520.751	27765.89	0.0591	P	0.8	4.2
4	☐	1000.000	1027.409	54989.62	0.1150	P	1.7	2.7
5	☐	10000.00	10201.25	543091.01	1.1266	P	1.3	2.0
6	☐	20000.00	19897.40	1059034.78	2.1958	P	0.8	-0.5
7	☐	100.000						

y = 1.1027E-004 * x + 0.0017
R = 0.9999
DL = 1.257 ppb
BEC = 15.63 ppb

Weight: <None>
Min Conc: <None>

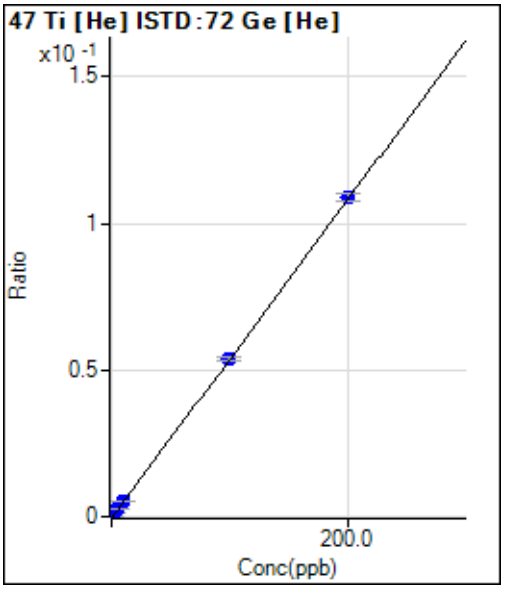
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	163.34	0.0001	P	24.	
2	☐	2.000	2.012	2323.55	0.0019	P	8.3	0.6
3	☐	5.000	5.146	5691.20	0.0046	P	3.8	2.9
4	☐	10.000	10.279	11294.37	0.0090	P	2.5	2.8
5	☐	100.000	102.011	114781.37	0.0880	P	1.3	2.0
6	☐	200.000	198.977	222668.00	0.1716	P	1.8	-0.5
7	☐	1.000						

y = 8.6167E-004 * x + 1.3151E-004
R = 0.9999
DL = 0.1142 ppb
BEC = 0.1526 ppb

Weight: <None>
Min Conc: <None>

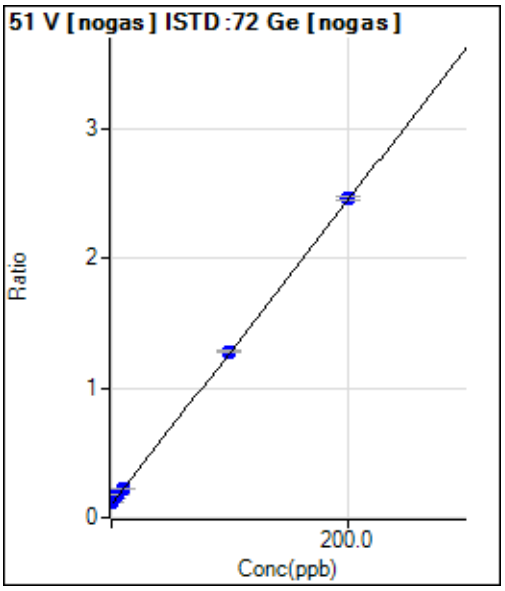


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	1.1	
2	☐	2.000	2.233	576.69	0.0012	P	29.	11.7
3	☐	5.000	5.173	1330.08	0.0028	P	0.9	3.5
4	☐	10.000	9.724	2536.92	0.0053	P	8.7	-2.8
5	☐	100.000	99.167	25992.60	0.0539	P	2.1	-0.8
6	☐	200.000	200.423	52548.16	0.1090	P	2.3	0.2
7	☐	1.000						

y = 5.4352E-004 * x + 2.1546E-005
R = 1.0000
DL = 0.001255 ppb
BEC = 0.03964 ppb

Weight: <None>
Min Conc: <None>

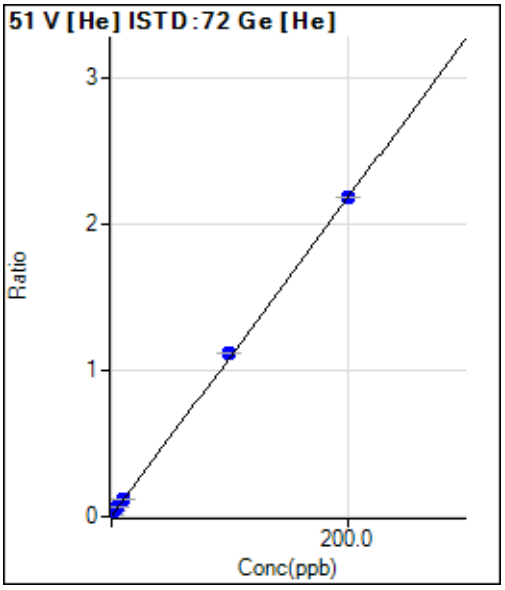
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143612.65	0.1156	P	1.5	
2	☐	2.000	2.313	177857.83	0.1428	P	1.3	15.7
3	☐	5.000	4.940	216416.21	0.1736	P	1.3	-1.2
4	☐	10.000	9.419	284125.38	0.2262	P	1.1	-5.8
5	☐	100.000	99.348	1670690.65	1.2815	P	1.5	-0.7
6	☐	200.000	200.353	3201687.24	2.4669	P	1.2	0.2
7	☐	1.000						

y = 0.0117 * x + 0.1156
R = 1.0000
DL = 0.4533 ppb
BEC = 9.851 ppb

Weight: <None>
Min Conc: <None>

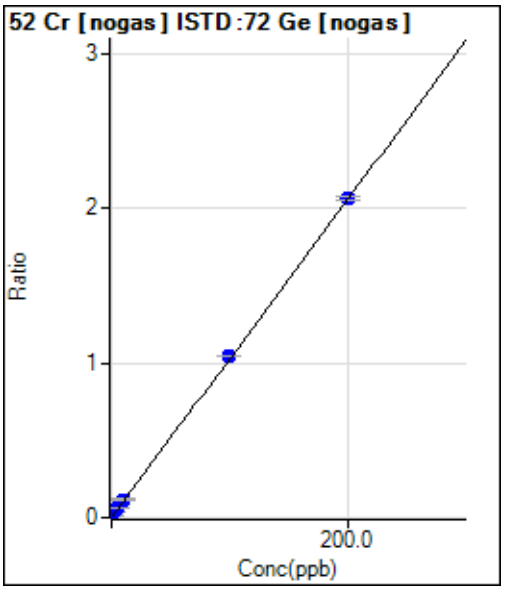


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6394.72	0.0138	P	3.0	
2	☐	2.000	2.102	17106.36	0.0366	P	0.8	5.1
3	☐	5.000	4.951	31740.93	0.0676	P	1.8	-1.0
4	☐	10.000	9.848	57788.56	0.1209	P	1.2	-1.5
5	☐	100.000	101.457	538470.81	1.1170	P	0.9	1.5
6	☐	200.000	199.279	1051733.47	2.1806	P	0.4	-0.4
7	☐	1.000						

y = 0.0109 * x + 0.0138
R = 1.0000
DL = 0.1155 ppb
BEC = 1.267 ppb

Weight: <None>
Min Conc: <None>

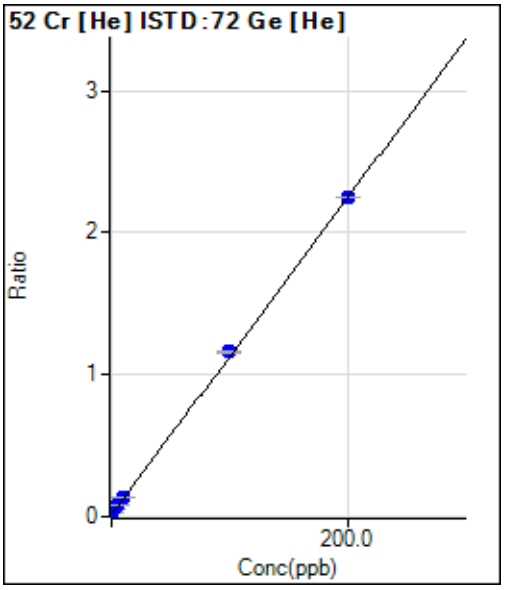
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13943.34	0.0112	P	1.7	
2	☐	2.000	2.140	41396.92	0.0332	P	1.0	7.0
3	☐	5.000	5.131	79759.70	0.0640	P	2.0	2.6
4	☐	10.000	10.300	147128.89	0.1171	P	2.3	3.0
5	☐	100.000	100.638	1363573.10	1.0457	P	0.4	0.6
6	☐	200.000	199.661	2678572.61	2.0637	P	0.9	-0.2
7	☐	1.000						

y = 0.0103 * x + 0.0112
R = 1.0000
DL = 0.0563 ppb
BEC = 1.092 ppb

Weight: <None>
Min Conc: <None>

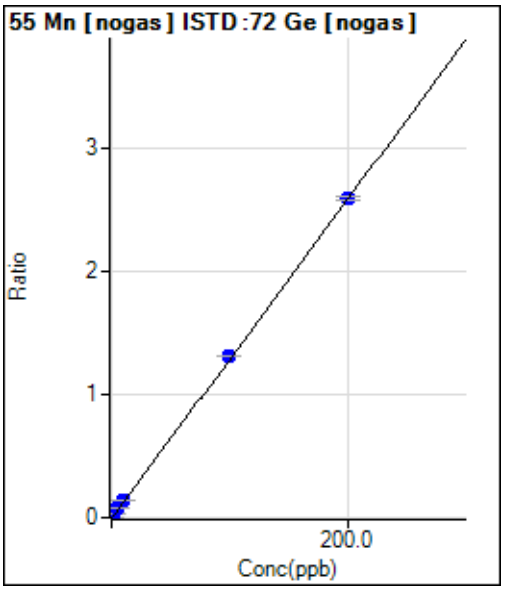


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11521.26	0.0248	P	4.0	
2	☐	2.000	2.273	23441.79	0.0502	P	0.1	13.7
3	☐	5.000	5.085	38315.42	0.0816	P	2.4	1.7
4	☐	10.000	10.253	66629.92	0.1393	P	1.3	2.5
5	☐	100.000	101.749	559862.15	1.1613	P	0.9	1.7
6	☐	200.000	199.108	1084604.38	2.2488	P	0.5	-0.4
7	☐	1.000						

y = 0.0112 * x + 0.0248
R = 0.9999
DL = 0.2638 ppb
BEC = 2.222 ppb

Weight: <None>
Min Conc: <None>

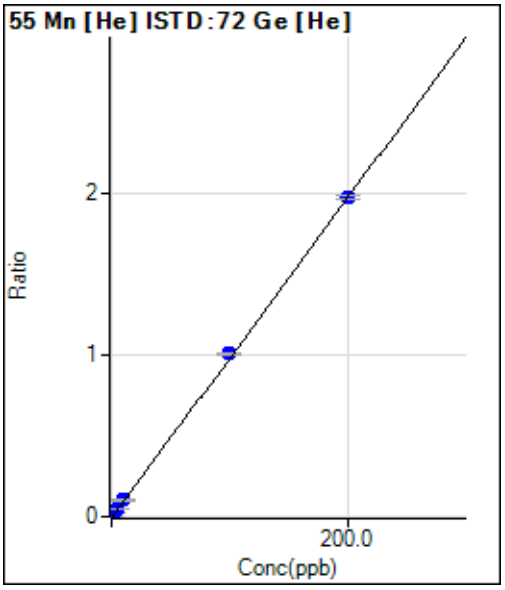
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5824.55	0.0047	P	4.8	
2	☐	2.000	2.110	40039.95	0.0321	P	2.0	5.5
3	☐	5.000	5.162	89554.35	0.0718	P	1.0	3.2
4	☐	10.000	10.363	175221.41	0.1395	P	2.0	3.6
5	☐	100.000	100.875	1716706.95	1.3167	P	0.7	0.9
6	☐	200.000	199.539	3374570.16	2.5999	P	1.0	-0.2
7	☐	1.000						

y = 0.0130 * x + 0.0047
R = 1.0000
DL = 0.05196 ppb
BEC = 0.3605 ppb

Weight: <None>
Min Conc: <None>

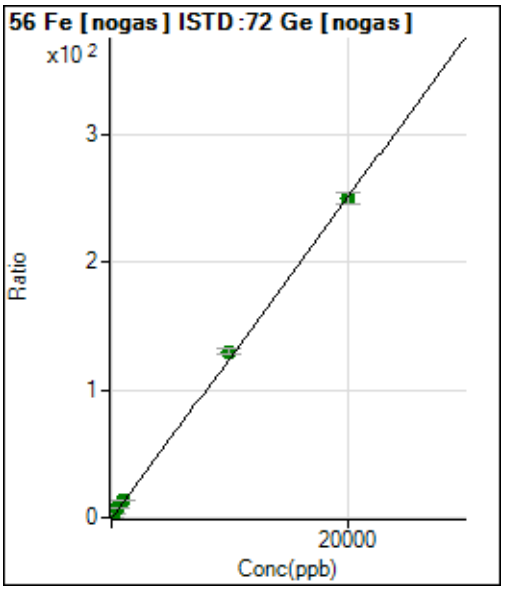


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0010	P	1.2	
2	☐	2.000	2.094	10170.26	0.0218	P	3.8	4.7
3	☐	5.000	5.130	24383.33	0.0519	P	2.0	2.6
4	☐	10.000	10.161	48742.44	0.1019	P	2.7	1.6
5	☐	100.000	101.482	486583.89	1.0092	P	0.4	1.5
6	☐	200.000	199.247	955225.33	1.9806	P	0.7	-0.4
7	☐	1.000						

y = 0.0099 * x + 9.7674E-004
R = 1.0000
DL = 0.003514 ppb
BEC = 0.09831 ppb

Weight: <None>
Min Conc: <None>

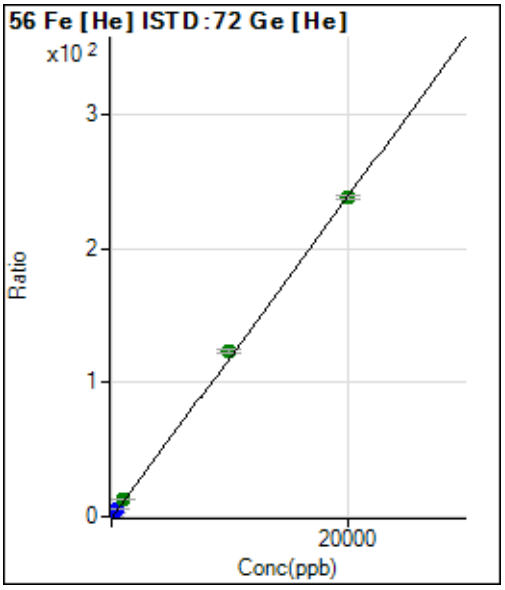
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	599942.20	0.4829	P	0.5	
2	☐	200.000	231.437	4225232.96	3.3913	A	1.0	15.7
3	☐	500.000	557.018	9329005.49	7.4828	A	1.9	11.4
4	☐	1000.000	1083.899	17719908.90	14.1039	A	0.6	8.4
5	☐	10000.00	10305.94	169390247.4	129.993	A	3.6	3.1
6	☐	20000.00	19841.09	324059628.5	249.817	A	3.3	-0.8
7	☐	100.000						

y = 0.0126 * x + 0.4829
R = 0.9998
DL = 0.5714 ppb
BEC = 38.43 ppb

Weight: <None>
Min Conc: <None>

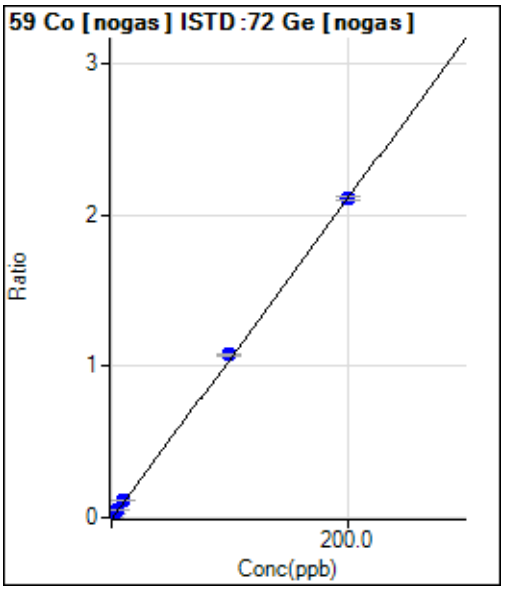


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19283.14	0.0415	P	2.4	
2	☐	200.000	183.416	1045831.65	2.2399	P	0.1	-8.3
3	☐	500.000	447.083	2535024.34	5.4000	P	1.7	-10.6
4	☐	1000.000	1067.836	6139400.53	12.8401	A	1.2	6.8
5	☐	10000.00	10263.59	59318889.12	123.055	A	2.0	2.6
6	☐	20000.00	19866.30	114857451.6	238.148	A	1.5	-0.7
7	☐	100.000						

y = 0.0120 * x + 0.0415
R = 0.9999
DL = 0.2482 ppb
BEC = 3.466 ppb

Weight: <None>
Min Conc: <None>

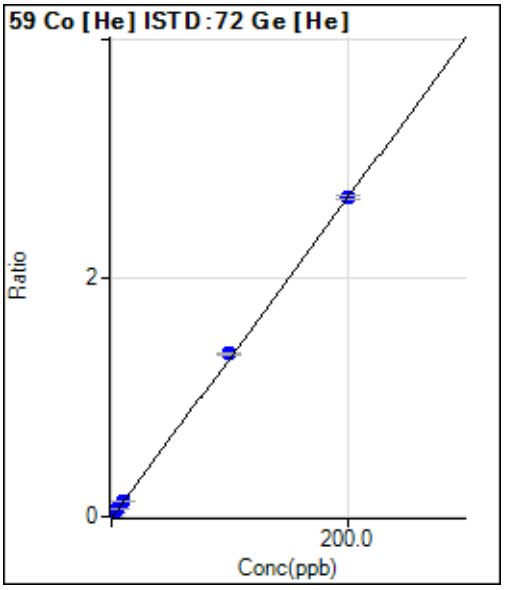
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	38.	
2	☐	2.000	2.068	27455.29	0.0220	P	1.9	3.4
3	☐	5.000	5.203	68954.55	0.0553	P	0.5	4.1
4	☐	10.000	10.343	138014.74	0.1098	P	1.4	3.4
5	☐	100.000	101.699	1407179.35	1.0793	P	0.9	1.7
6	☐	200.000	199.127	2742944.54	2.1132	P	0.8	-0.4
7	☐	1.000						

y = 0.0106 * x + 8.6050E-005
R = 1.0000
DL = 0.009354 ppb
BEC = 0.008109 ppb

Weight: <None>
Min Conc: <None>

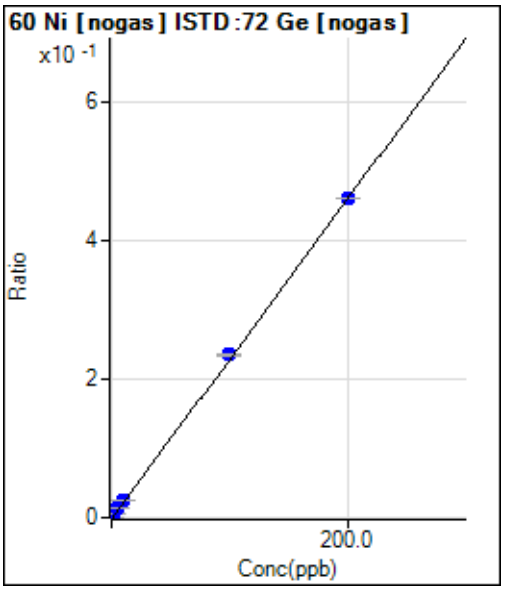


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	68.	
2	☐	2.000	2.065	12992.46	0.0278	P	3.7	3.3
3	☐	5.000	5.217	32973.01	0.0702	P	3.0	4.3
4	☐	10.000	9.956	64079.58	0.1340	P	2.0	-0.4
5	☐	100.000	101.454	658258.18	1.3655	P	1.0	1.5
6	☐	200.000	199.269	1293478.81	2.6819	P	1.7	-0.4
7	☐	1.000						

y = 0.0135 * x + 3.5819E-005
R = 1.0000
DL = 0.005485 ppb
BEC = 0.002661 ppb

Weight: <None>
Min Conc: <None>

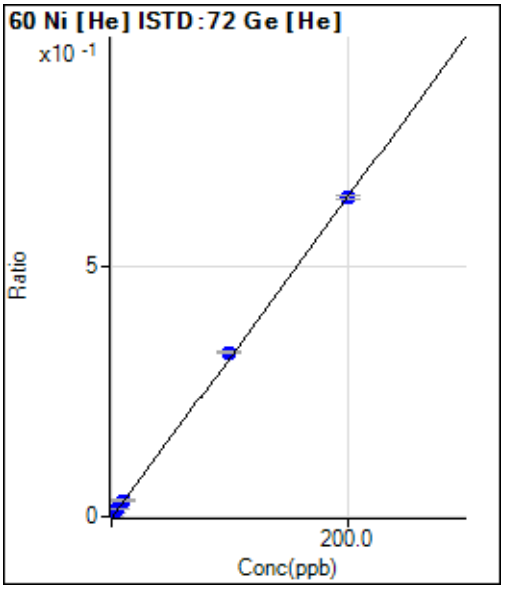
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.67	0.0003	P	29.	
2	☐	2.000	2.058	6258.09	0.0050	P	2.4	2.9
3	☐	5.000	5.318	15685.09	0.0126	P	0.9	6.4
4	☐	10.000	10.451	30745.16	0.0245	P	3.6	4.5
5	☐	100.000	101.532	307138.77	0.2355	P	0.5	1.5
6	☐	200.000	199.203	599566.32	0.4619	P	0.6	-0.4
7	☐	1.000						

y = 0.0023 * x + 2.5458E-004
R = 1.0000
DL = 0.09636 ppb
BEC = 0.1099 ppb

Weight: <None>
Min Conc: <None>

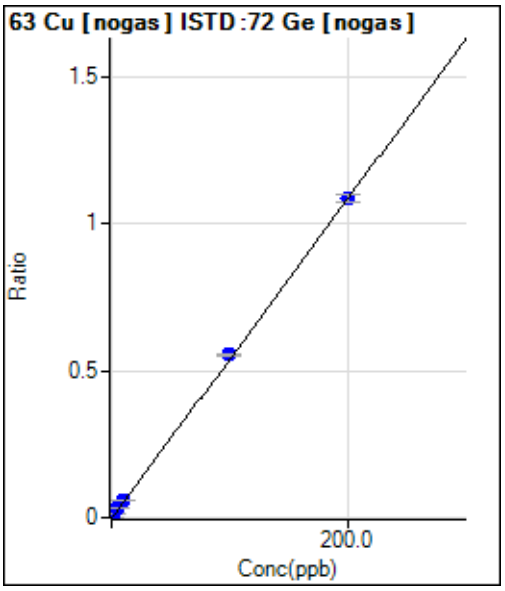


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	25.	
2	☐	2.000	2.206	3447.12	0.0074	P	0.7	10.3
3	☐	5.000	5.250	8038.96	0.0171	P	1.2	5.0
4	☐	10.000	10.043	15518.21	0.0325	P	3.0	0.4
5	☐	100.000	102.349	158044.05	0.3278	P	1.2	2.3
6	☐	200.000	198.815	306970.06	0.6365	P	0.9	-0.6
7	☐	1.000						

y = 0.0032 * x + 3.2371E-004
R = 0.9999
DL = 0.0763 ppb
BEC = 0.1012 ppb

Weight: <None>
Min Conc: <None>

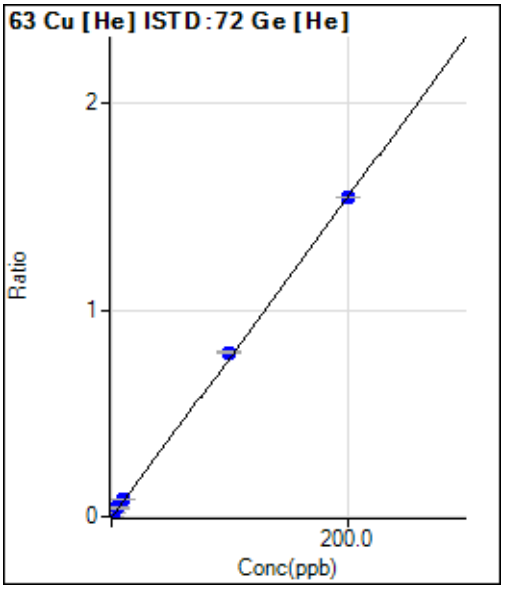
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2380.22	0.0019	P	6.2	
2	☐	2.000	1.957	15648.35	0.0126	P	2.5	-2.2
3	☐	5.000	5.088	36905.59	0.0296	P	0.7	1.8
4	☐	10.000	10.509	74243.17	0.0591	P	0.8	5.1
5	☐	100.000	101.300	721249.54	0.5531	P	0.5	1.3
6	☐	200.000	199.323	1409706.96	1.0864	P	1.9	-0.3
7	☐	1.000						

y = 0.0054 * x + 0.0019
R = 1.0000
DL = 0.06534 ppb
BEC = 0.3521 ppb

Weight: <None>
Min Conc: <None>

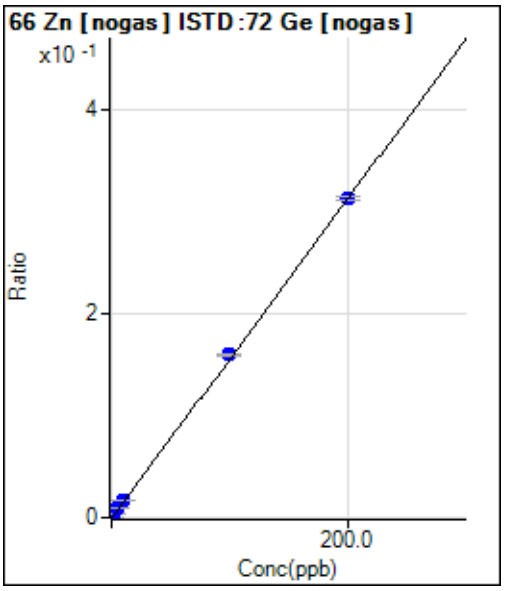


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1316.76	0.0028	P	1.7	
2	☐	2.000	2.008	8595.95	0.0184	P	3.0	0.4
3	☐	5.000	5.127	20000.25	0.0426	P	4.1	2.5
4	☐	10.000	10.250	39368.65	0.0823	P	1.0	2.5
5	☐	100.000	102.120	383213.65	0.7949	P	0.4	2.1
6	☐	200.000	198.924	745484.52	1.5457	P	0.1	-0.5
7	☐	1.000						

y = 0.0078 * x + 0.0028
R = 0.9999
DL = 0.01887 ppb
BEC = 0.3658 ppb

Weight: <None>
Min Conc: <None>

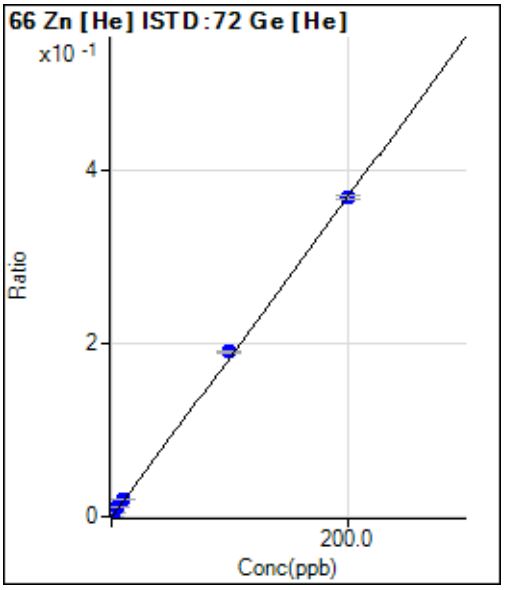
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	890.04	0.0007	P	6.6	
2	☐	2.000	2.192	5174.31	0.0042	P	4.1	9.6
3	☐	5.000	5.277	11214.40	0.0090	P	3.9	5.5
4	☐	10.000	10.388	21372.15	0.0170	P	0.9	3.9
5	☐	100.000	101.323	208167.25	0.1596	P	0.7	1.3
6	☐	200.000	199.310	406635.67	0.3133	P	1.4	-0.3
7	☐	1.000						

y = 0.0016 * x + 7.1645E-004
R = 1.0000
DL = 0.09071 ppb
BEC = 0.4568 ppb

Weight: <None>
Min Conc: <None>

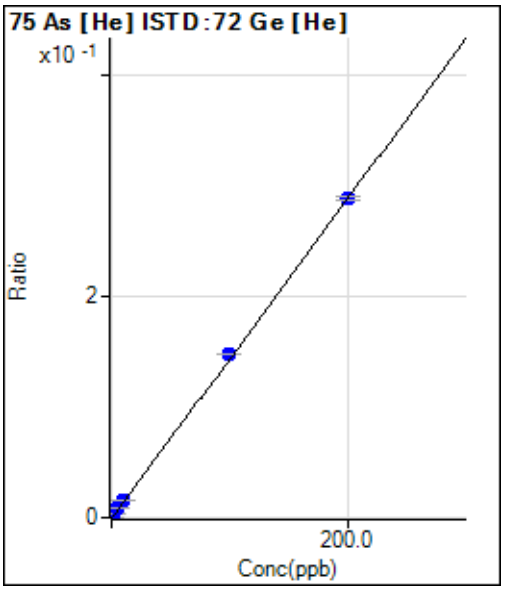


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	400.01	0.0009	P	1.7	
2	☐	2.000	2.055	2180.20	0.0047	P	8.4	2.8
3	☐	5.000	5.130	4867.54	0.0104	P	1.0	2.6
4	☐	10.000	10.036	9303.03	0.0195	P	5.4	0.4
5	☐	100.000	102.352	91853.66	0.1905	P	1.7	2.4
6	☐	200.000	198.818	178126.66	0.3693	P	1.1	-0.6
7	☐	1.000						

y = 0.0019 * x + 8.6172E-004
R = 0.9999
DL = 0.02358 ppb
BEC = 0.465 ppb

Weight: <None>
Min Conc: <None>

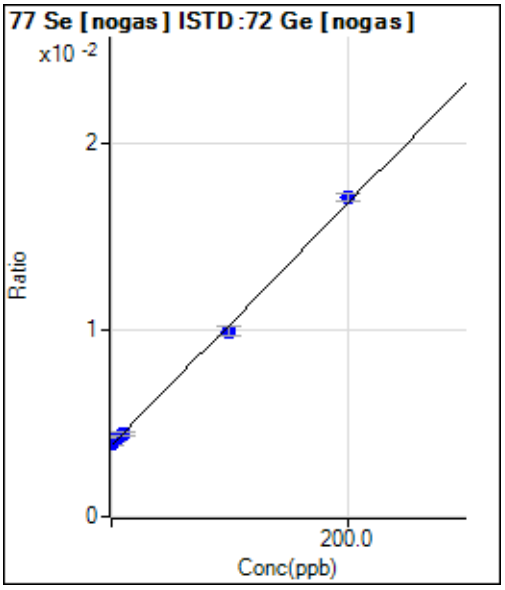
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	282.23	0.0006	P	15.	
2	☐	2.000	2.109	1706.77	0.0037	P	2.9	5.5
3	☐	5.000	5.122	3759.38	0.0080	P	2.0	2.4
4	☐	10.000	10.137	7294.05	0.0153	P	1.4	1.4
5	☐	100.000	101.772	71176.67	0.1476	P	1.0	1.8
6	☐	200.000	199.103	139031.39	0.2883	P	0.6	-0.4
7	☐	1.000						

y = 0.0014 * x + 6.0867E-004
R = 0.9999
DL = 0.2008 ppb
BEC = 0.4213 ppb

Weight: <None>
Min Conc: <None>

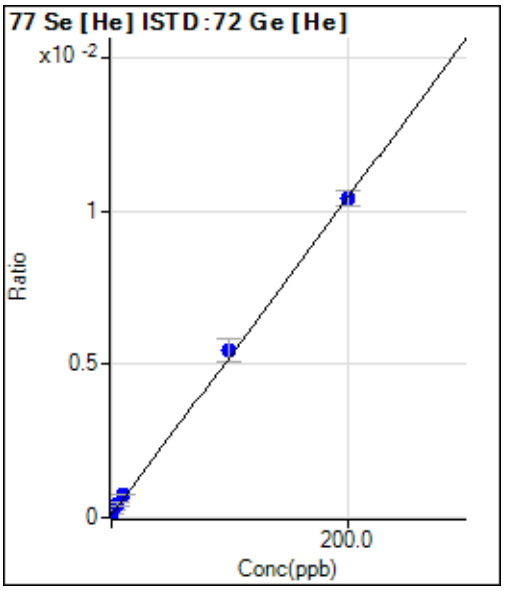


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4870.90	0.0039	P	4.5	
2	☐	2.000	2.735	5107.64	0.0041	P	1.8	36.7
3	☐	5.000	4.941	5287.70	0.0042	P	3.2	-1.2
4	☐	10.000	7.427	5531.12	0.0044	P	4.9	-25.7
5	☐	100.000	92.824	12915.78	0.0099	P	5.2	-7.2
6	☐	200.000	203.711	22156.86	0.0171	P	2.6	1.9
7	☐	1.000						

y = 6.4567E-005 * x + 0.0039
R = 0.9990
DL = 8.277 ppb
BEC = 60.74 ppb

Weight: <None>
Min Conc: <None>

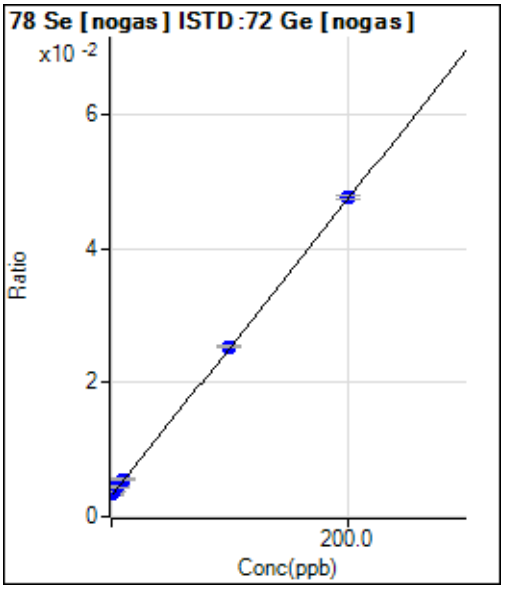
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	23.	
2	☐	2.000	3.427	146.67	0.0003	P	40.	71.3
3	☐	5.000	5.868	206.67	0.0004	P	17.	17.4
4	☐	10.000	11.767	356.68	0.0007	P	2.7	17.7
5	☐	100.000	102.604	2630.27	0.0055	P	13.	2.6
6	☐	200.000	198.574	5027.65	0.0104	P	4.9	-0.7
7	☐	1.000						

y = 5.1808E-005 * x + 1.3628E-004
R = 0.9999
DL = 1.844 ppb
BEC = 2.63 ppb

Weight: <None>
Min Conc: <None>

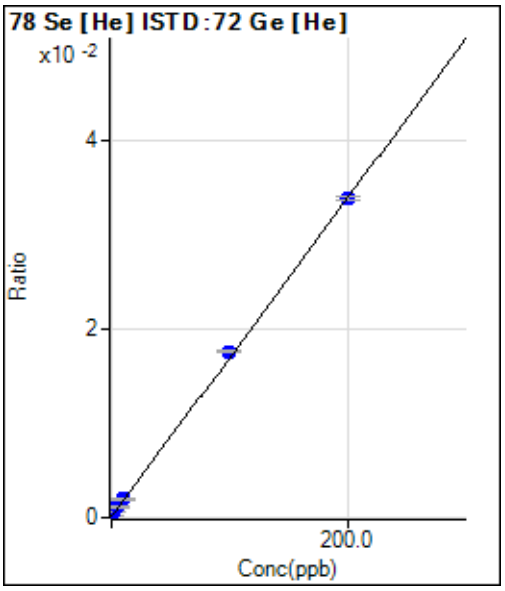


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4190.67	0.0034	P	4.6	
2	☐	2.000	1.866	4717.50	0.0038	P	4.5	-6.7
3	☐	5.000	4.899	5557.79	0.0045	P	6.5	-2.0
4	☐	10.000	9.971	7011.77	0.0056	P	5.9	-0.3
5	☐	100.000	99.530	33150.71	0.0254	P	0.5	-0.5
6	☐	200.000	200.241	61952.60	0.0477	P	1.4	0.1
7	☐	1.000						

y = 2.2154E-004 * x + 0.0034
R = 1.0000
DL = 2.085 ppb
BEC = 15.23 ppb

Weight: <None>
Min Conc: <None>

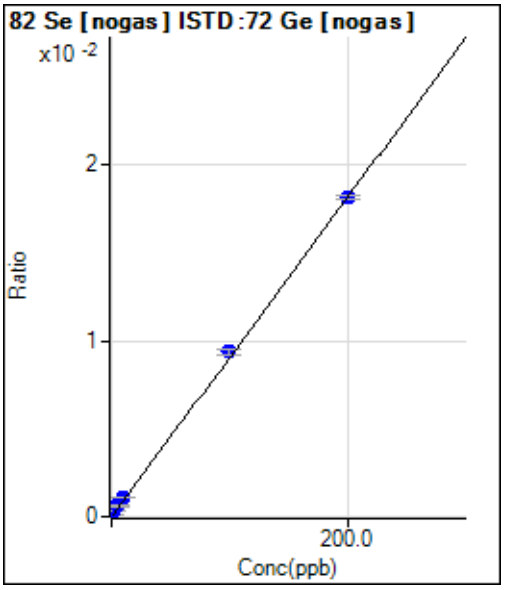
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0003	P	3.8	
2	☐	2.000	2.099	296.67	0.0006	P	6.6	5.0
3	☐	5.000	5.067	534.01	0.0011	P	3.2	1.3
4	☐	10.000	10.029	945.36	0.0020	P	4.0	0.3
5	☐	100.000	102.622	8505.12	0.0176	P	0.9	2.6
6	☐	200.000	198.685	16346.98	0.0339	P	0.8	-0.7
7	☐	1.000						

y = 1.6918E-004 * x + 2.8007E-004
R = 0.9999
DL = 0.1894 ppb
BEC = 1.655 ppb

Weight: <None>
Min Conc: <None>

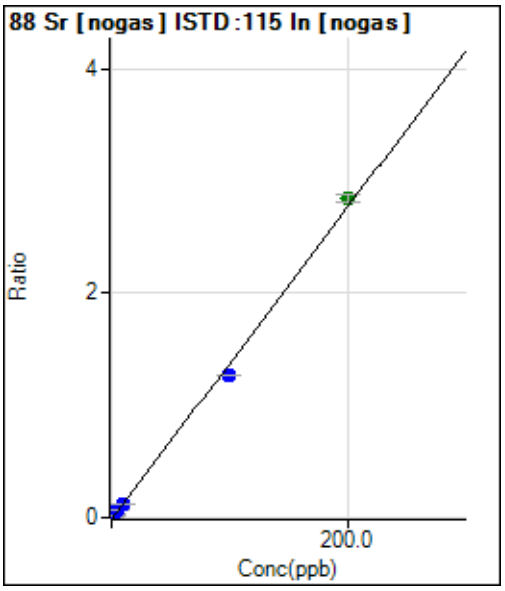


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0001	P	33.	
2	☐	2.000	2.610	400.01	0.0003	P	15.	30.5
3	☐	5.000	5.727	753.37	0.0006	P	6.2	14.5
4	☐	10.000	11.127	1376.76	0.0011	P	4.2	11.3
5	☐	100.000	102.077	12231.93	0.0094	P	3.9	2.1
6	☐	200.000	198.881	23609.05	0.0182	P	1.5	-0.6
7	☐	1.000						

y = 9.1047E-005 * x + 8.3030E-005
R = 0.9999
DL = 0.9068 ppb
BEC = 0.9119 ppb

Weight: <None>
Min Conc: <None>

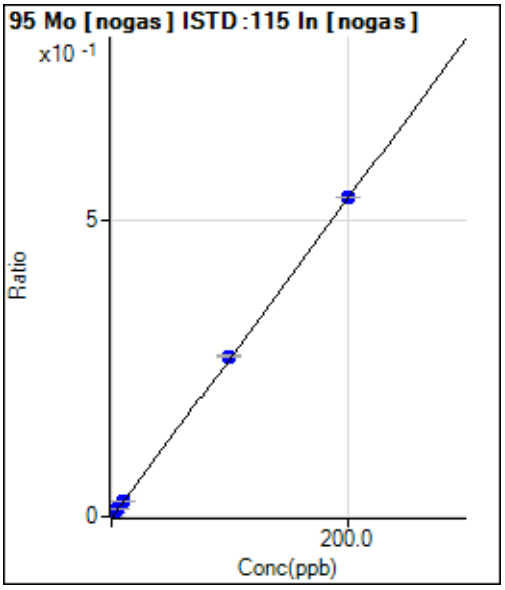
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	410.01	0.0003	P	5.1	
2	☐	2.000	1.840	34544.13	0.0259	P	1.8	-8.0
3	☐	5.000	4.591	86237.86	0.0642	P	1.6	-8.2
4	☐	10.000	9.002	171018.55	0.1257	P	0.6	-10.0
5	☐	100.000	90.975	1762014.92	1.2674	P	0.7	-9.0
6	☐	200.000	204.574	3975639.73	2.8495	A	2.3	2.3
7	☐	1.000						

y = 0.0139 * x + 3.0838E-004
R = 0.9986
DL = 0.003383 ppb
BEC = 0.02214 ppb

Weight: <None>
Min Conc: <None>

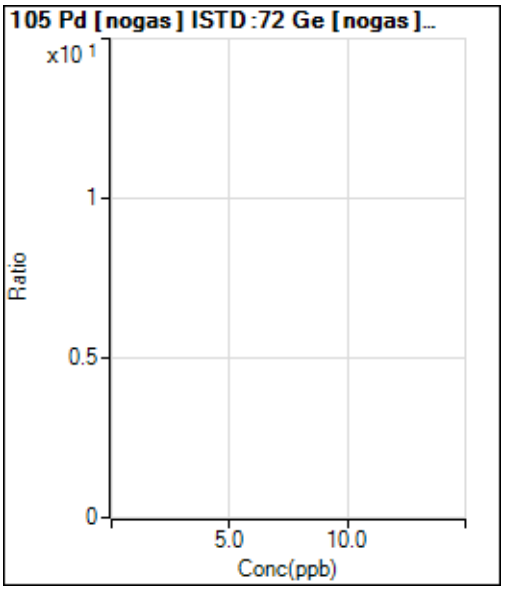


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.68	0.0002	P	13.	
2	☐	2.000	2.030	7515.39	0.0056	P	1.4	1.5
3	☐	5.000	4.899	17927.88	0.0134	P	3.5	-2.0
4	☐	10.000	9.912	36509.02	0.0268	P	0.8	-0.9
5	☐	100.000	100.377	375463.04	0.2700	P	1.5	0.4
6	☐	200.000	199.818	750005.72	0.5374	P	0.5	-0.1
7	☐	1.000						

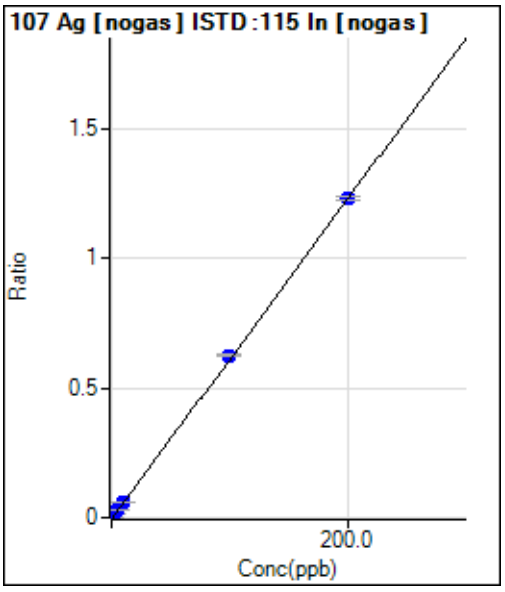
y = 0.0027 * x + 1.8543E-004
R = 1.0000
DL = 0.02871 ppb
BEC = 0.06897 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

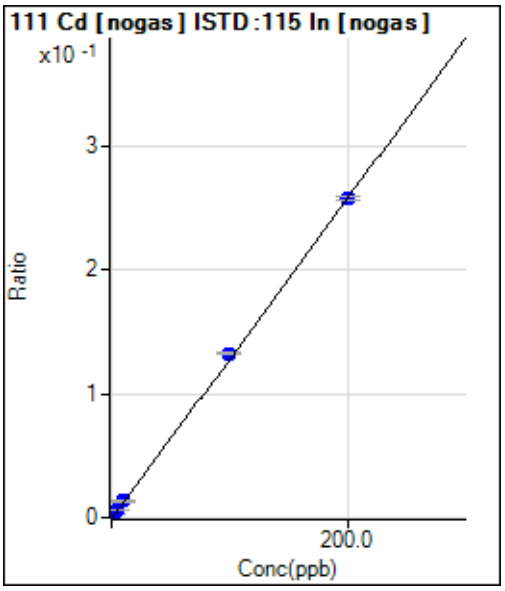


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	13.	
2	☐	2.000	2.089	17330.63	0.0130	P	3.7	4.4
3	☐	5.000	5.105	42505.72	0.0317	P	3.1	2.1
4	☐	10.000	10.027	84504.47	0.0621	P	0.8	0.3
5	☐	100.000	101.372	871928.94	0.6270	P	1.5	1.4
6	☐	200.000	199.309	1720687.99	1.2327	P	1.0	-0.3
7	☐	1.000						

y = 0.0062 * x + 9.5324E-005
R = 1.0000
DL = 0.006033 ppb
BEC = 0.01541 ppb

Weight: <None>
Min Conc: <None>

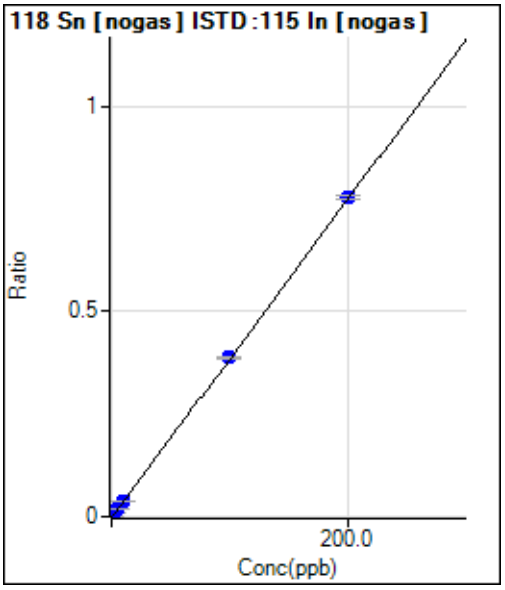
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.978	3417.14	0.0026	P	7.2	-1.1
3	☐	5.000	5.024	8742.76	0.0065	P	3.1	0.5
4	☐	10.000	10.265	18108.21	0.0133	P	2.2	2.7
5	☐	100.000	102.192	184266.41	0.1325	P	1.6	2.2
6	☐	200.000	198.890	359975.67	0.2579	P	1.2	-0.6
7	☐	1.000						

y = 0.0013 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

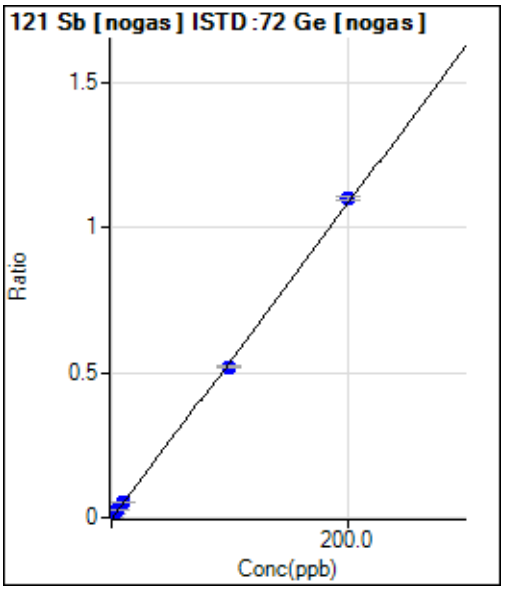


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1160.07	0.0009	P	8.9	
2	☐	2.000	1.979	11404.69	0.0086	P	1.8	-1.0
3	☐	5.000	4.903	26735.05	0.0199	P	0.9	-1.9
4	☐	10.000	9.752	52739.59	0.0388	P	2.8	-2.5
5	☐	100.000	99.532	538983.76	0.3875	P	1.9	-0.5
6	☐	200.000	200.249	1087308.76	0.7788	P	1.7	0.1
7	☐	1.000						

y = 0.0039 * x + 8.7188E-004
R = 1.0000
DL = 0.06007 ppb
BEC = 0.2244 ppb

Weight: <None>
Min Conc: <None>

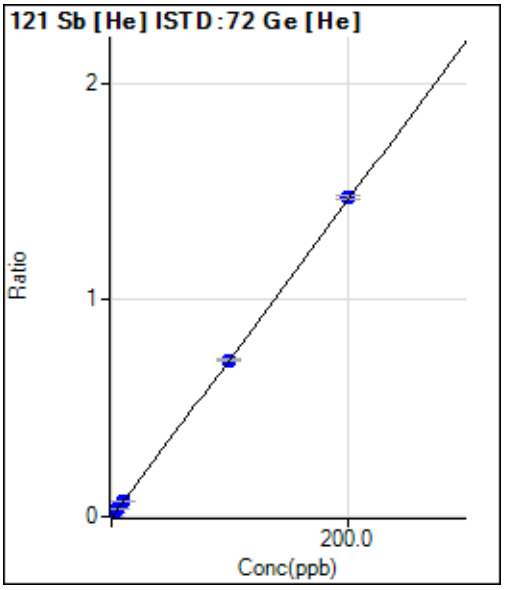
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	943.39	0.0008	P	12.	
2	☐	2.000	1.815	13239.62	0.0106	P	1.8	-9.3
3	☐	5.000	4.596	32096.16	0.0257	P	1.6	-8.1
4	☐	10.000	9.488	65756.34	0.0523	P	1.7	-5.1
5	☐	100.000	95.366	677206.52	0.5192	P	1.2	-4.6
6	☐	200.000	202.354	1429430.97	1.1008	P	1.0	1.2
7	☐	1.000						

y = 0.0054 * x + 7.5892E-004
R = 0.9996
DL = 0.05359 ppb
BEC = 0.1396 ppb

Weight: <None>
Min Conc: <None>

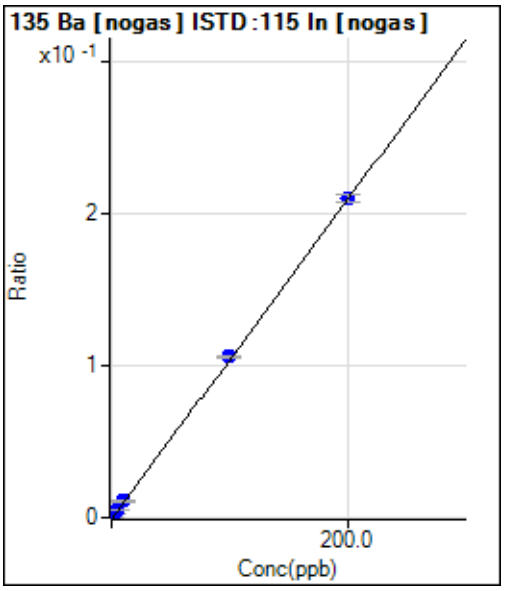


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	523.35	0.0011	P	22.	
2	☐	2.000	1.888	6991.81	0.0150	P	3.9	-5.6
3	☐	5.000	4.734	16826.74	0.0358	P	2.0	-5.3
4	☐	10.000	9.293	33118.37	0.0693	P	2.9	-7.1
5	☐	100.000	98.261	347852.03	0.7216	P	1.0	-1.7
6	☐	200.000	200.913	711022.05	1.4742	P	1.3	0.5
7	☐	1.000						

y = 0.0073 * x + 0.0011
R = 0.9999
DL = 0.1014 ppb
BEC = 0.154 ppb

Weight: <None>
Min Conc: <None>

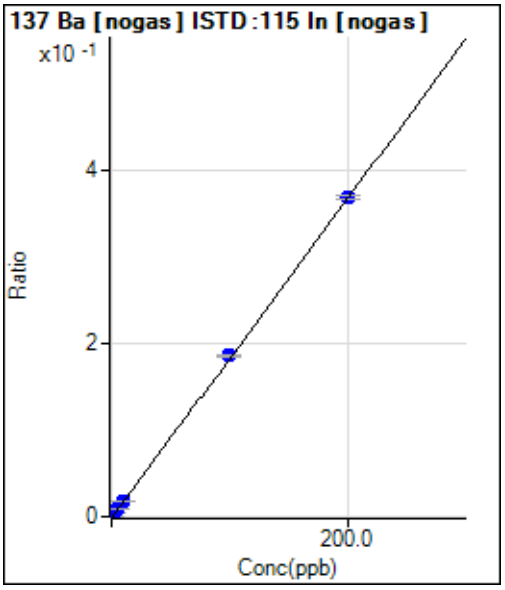
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	79.	
2	☐	2.000	1.903	2696.97	0.0020	P	4.1	-4.9
3	☐	5.000	4.896	6948.47	0.0052	P	3.9	-2.1
4	☐	10.000	10.364	14881.32	0.0109	P	4.6	3.6
5	☐	100.000	100.617	147381.56	0.1060	P	1.1	0.6
6	☐	200.000	199.677	293650.93	0.2103	P	2.1	-0.2
7	☐	1.000						

y = 0.0011 * x + 2.0141E-005
R = 1.0000
DL = 0.04535 ppb
BEC = 0.01912 ppb

Weight: <None>
Min Conc: <None>

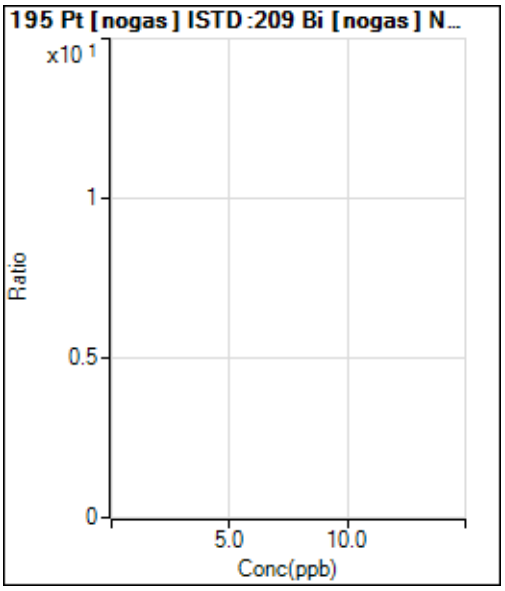


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	60.00	0.0000	P	66.	
2	☐	2.000	2.043	5084.34	0.0038	P	5.1	2.1
3	☐	5.000	4.930	12275.49	0.0091	P	3.5	-1.4
4	☐	10.000	9.981	25132.39	0.0185	P	1.7	-0.2
5	☐	100.000	100.743	258693.45	0.1860	P	1.4	0.7
6	☐	200.000	199.631	514524.84	0.3686	P	1.5	-0.2
7	☐	1.000						

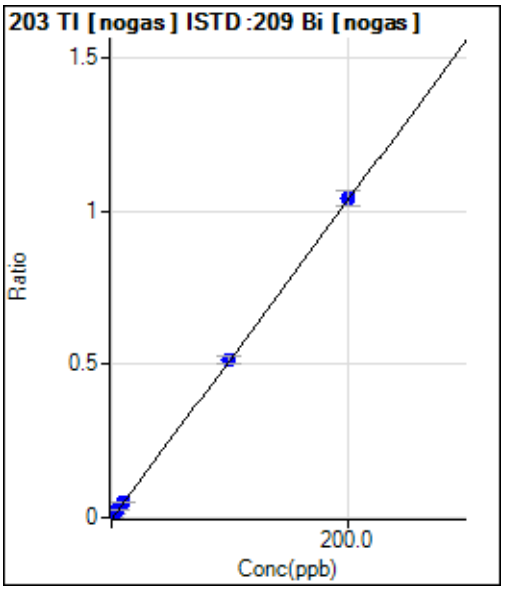
y = 0.0018 * x + 4.4988E-005
R = 1.0000
DL = 0.04865 ppb
BEC = 0.02437 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

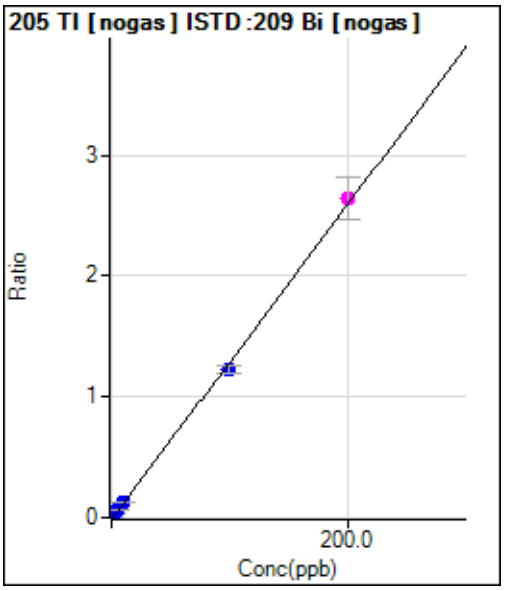


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	61.	
2	☐	2.000	2.020	11932.13	0.0105	P	4.4	1.0
3	☐	5.000	4.864	29121.30	0.0253	P	2.8	-2.7
4	☐	10.000	9.847	59181.47	0.0512	P	5.1	-1.5
5	☐	100.000	99.419	621523.73	0.5167	P	4.6	-0.6
6	☐	200.000	200.301	1259123.86	1.0410	P	4.3	0.2
7	☐	1.000						

y = 0.0052 * x + 2.0474E-005
R = 1.0000
DL = 0.00722 ppb
BEC = 0.003939 ppb

Weight: <None>
Min Conc: <None>

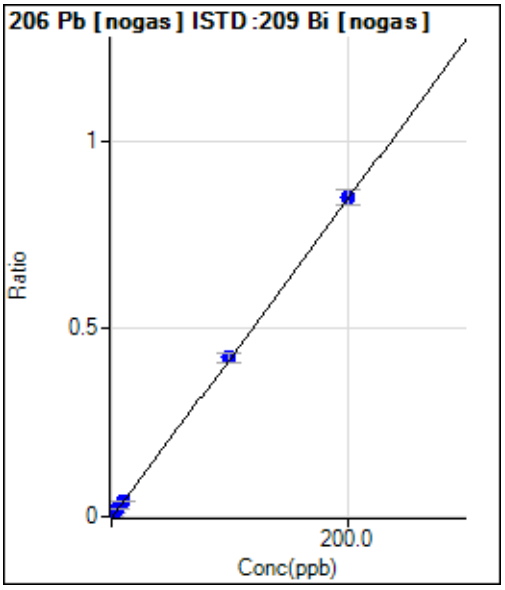
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96.67	0.0001	P	59.	
2	☐	2.000	1.898	28139.33	0.0248	P	5.0	-5.1
3	☐	5.000	4.682	70196.72	0.0611	P	7.8	-6.4
4	☐	10.000	9.408	141797.77	0.1227	P	5.2	-5.9
5	☐	100.000	94.419	1479888.10	1.2304	P	5.4	-5.6
6	☐	200.000	202.829	3194326.73	2.6430	M	13.	1.4
7	☐	1.000						

y = 0.0130 * x + 8.6818E-005
R = 0.9995
DL = 0.01179 ppb
BEC = 0.006663 ppb

Weight: <None>
Min Conc: <None>

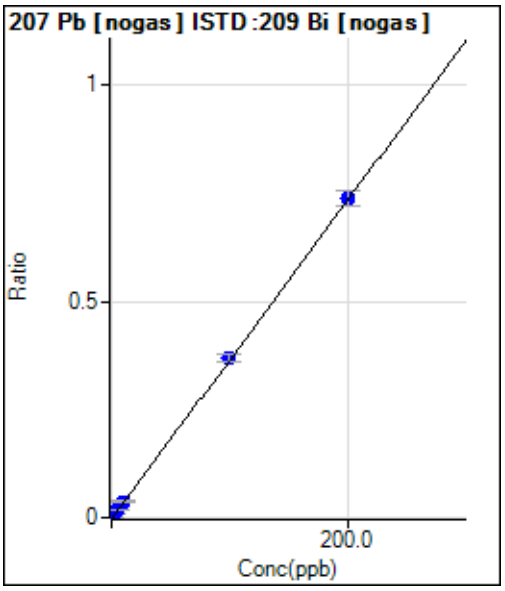


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	17.	
2	☐	2.000	2.059	10173.90	0.0090	P	5.3	2.9
3	☐	5.000	4.990	24629.21	0.0214	P	3.8	-0.2
4	☐	10.000	9.892	48794.53	0.0422	P	6.0	-1.1
5	☐	100.000	99.728	509367.58	0.4235	P	5.8	-0.3
6	☐	200.000	200.141	1027709.36	0.8497	P	4.9	0.1
7	☐	1.000						

y = 0.0042 * x + 2.3320E-004
R = 1.0000
DL = 0.0287 ppb
BEC = 0.05495 ppb

Weight: <None>
Min Conc: <None>

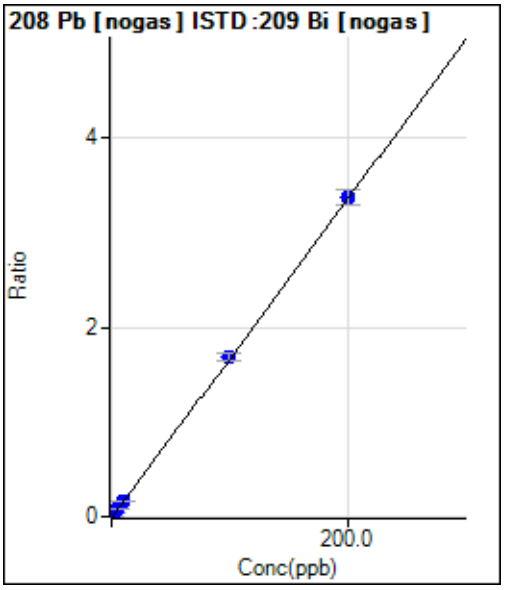
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	12.	
2	☐	2.000	1.996	8579.52	0.0076	P	6.4	-0.2
3	☐	5.000	4.956	21263.49	0.0185	P	4.1	-0.9
4	☐	10.000	9.949	42646.88	0.0369	P	6.0	-0.5
5	☐	100.000	99.762	442855.89	0.3682	P	5.3	-0.2
6	☐	200.000	200.123	893027.69	0.7384	P	4.3	0.1
7	☐	1.000						

y = 0.0037 * x + 2.0470E-004
R = 1.0000
DL = 0.02092 ppb
BEC = 0.0555 ppb

Weight: <None>
Min Conc: <None>

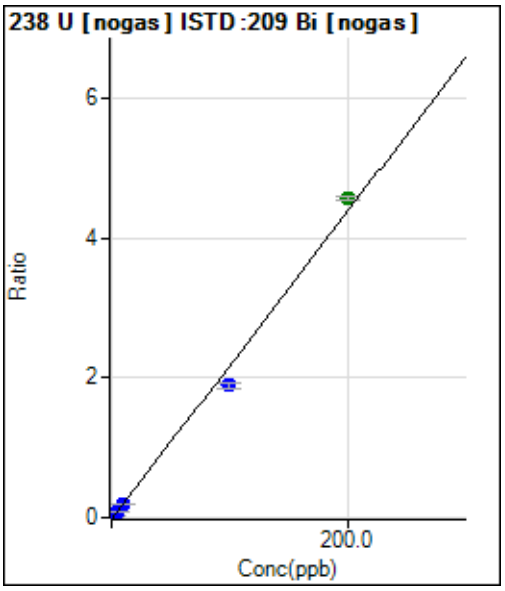


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1010.04	0.0009	P	2.5	
2	☐	2.000	2.020	39686.57	0.0350	P	5.7	1.0
3	☐	5.000	4.968	97473.88	0.0848	P	5.8	-0.6
4	☐	10.000	9.895	194140.91	0.1680	P	5.4	-1.0
5	☐	100.000	100.000	2031821.92	1.6892	P	5.3	0.0
6	☐	200.000	200.006	4085189.52	3.3776	P	4.5	0.0
7	☐	1.000						

y = 0.0169 * x + 9.0060E-004
R = 1.0000
DL = 0.003932 ppb
BEC = 0.05334 ppb

Weight: <None>
Min Conc: <None>

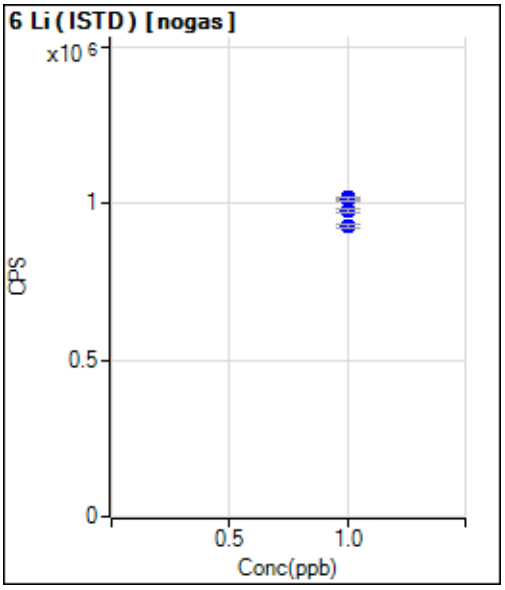
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	42.	
2	☐	2.000	1.685	42216.86	0.0372	P	6.0	-15.7
3	☐	5.000	4.191	106377.95	0.0925	P	6.3	-16.2
4	☐	10.000	8.469	216143.53	0.1870	P	4.0	-15.3
5	☐	100.000	85.620	2273215.02	1.8899	P	5.2	-14.4
6	☐	200.000	207.290	5533669.08	4.5755	A	0.8	3.6
7	☐	1.000						

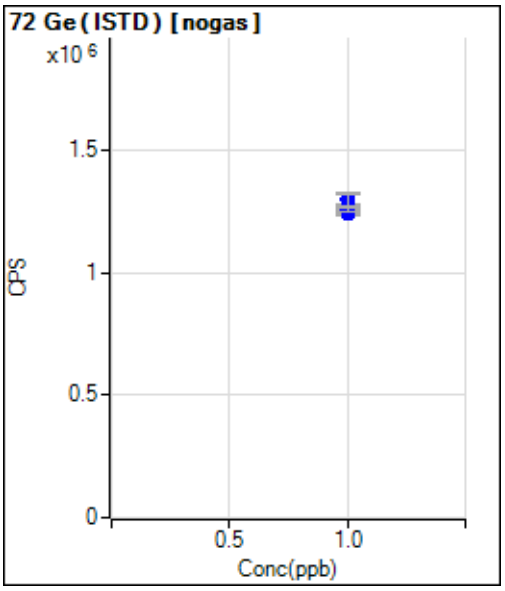
y = 0.0221 * x + 3.2725E-005
R = 0.9965
DL = 0.001895 ppb
BEC = 0.001483 ppb

Weight: <None>
Min Conc: <None>

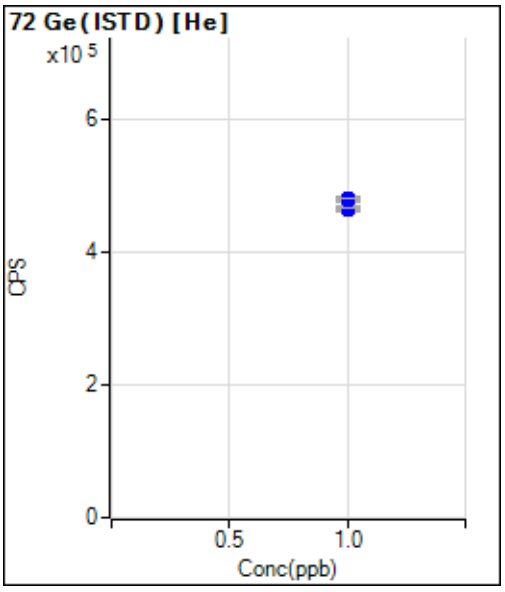


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1019192.69		P	0.5	
2	☐	1.000		1016035.97		P	0.2	
3	☐	1.000		1016954.73		P	0.9	
4	☐	1.000		1015407.04		P	1.3	
5	☐	1.000		976552.32		P	1.3	
6	☐	1.000		926974.35		P	1.9	
7	☐	1.000						

Calibration for 277_ICV.d

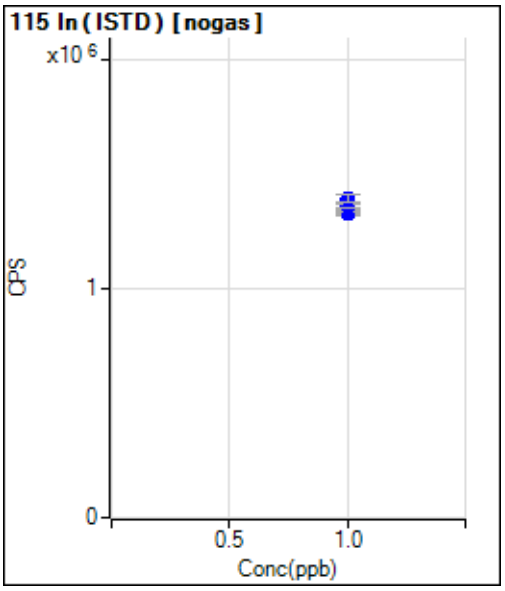


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1242233.31		P	0.9	
2	☐	1.000		1245996.44		P	1.2	
3	☐	1.000		1246871.81		P	1.2	
4	☐	1.000		1256449.30		P	1.2	
5	☐	1.000		1304023.52		P	3.2	
6	☐	1.000		1298265.14		P	3.8	
7	☐	1.000						

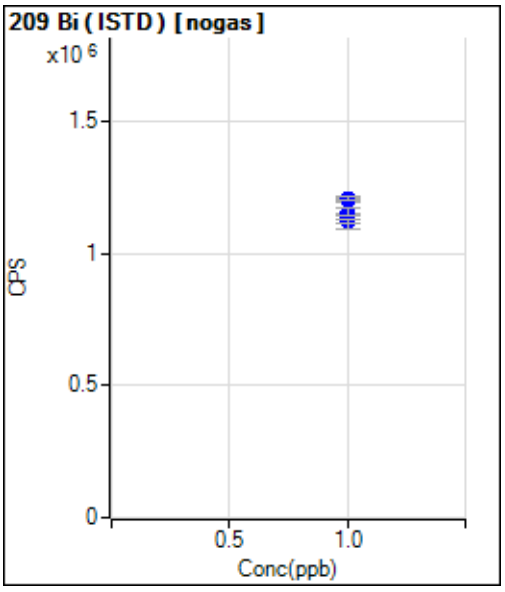


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		464161.96		P	1.0	
2	☐	1.000		466914.16		P	0.6	
3	☐	1.000		469461.87		P	0.5	
4	☐	1.000		478144.43		P	0.6	
5	☐	1.000		482116.50		P	1.2	
6	☐	1.000		482303.47		P	0.3	
7	☐	1.000						

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1329983.84		P	1.1	
2	☐	1.000		1332076.31		P	0.9	
3	☐	1.000		1342284.17		P	0.2	
4	☐	1.000		1360697.93		P	0.8	
5	☐	1.000		1390340.87		P	2.9	
6	☐	1.000		1395713.28		P	2.4	
7	☐	1.000						



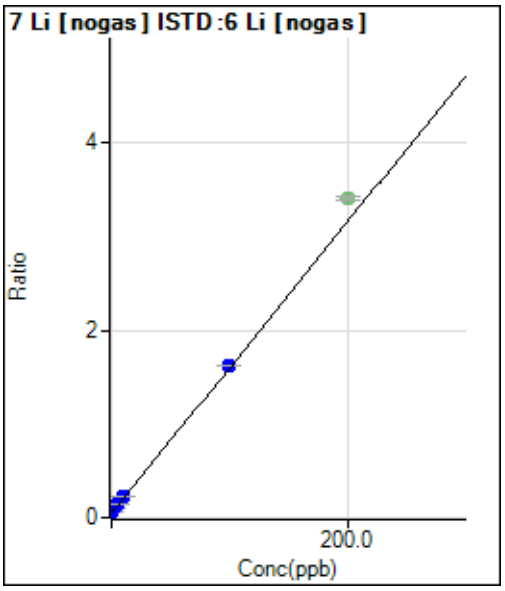
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1120971.65		P	4.6	
2	☐	1.000		1135220.37		P	3.2	
3	☐	1.000		1151572.04		P	4.3	
4	☐	1.000		1156950.63		P	2.7	
5	☐	1.000		1203047.66		P	0.9	
6	☐	1.000		1209451.39		P	1.2	
7	☐	1.000						

Calibration for 132_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 9:58:20 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	125CALB.d	CAL BLK	8/4/2023 2:43:10 PM
2	126CALS.d	2/10/200	8/4/2023 2:45:12 PM
3	127CALS.d	5/25/500	8/4/2023 2:47:14 PM
4	128CALS.d	10/50/1000	8/4/2023 2:49:16 PM
5	129CALS.d	100/500/10K	8/4/2023 2:51:18 PM
6	130CALS.d	200/1000/20K	8/4/2023 2:53:20 PM
7			

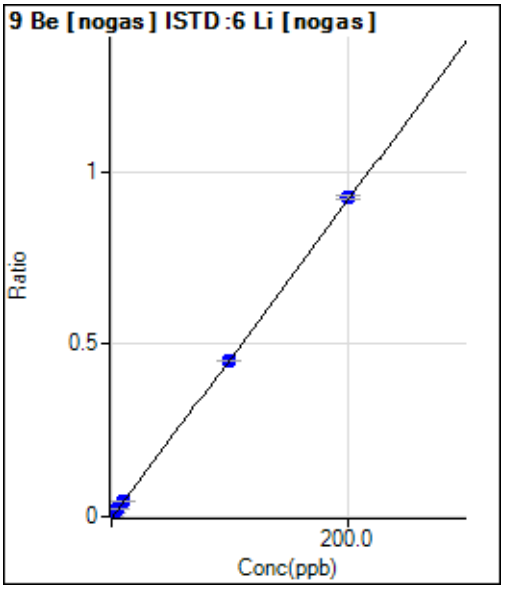
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	88770.39	0.0668	P	1.2	
2	☐	2.000	2.054	131184.02	0.0988	P	1.2	2.7
3	☐	5.000	4.973	190877.84	0.1442	P	1.3	-0.5
4	☐	10.000	9.727	290897.29	0.2183	P	0.3	-2.7
5	☐	100.000	100.028	2069318.56	1.6245	P	0.6	0.0
6	☑	200.000		4092981.29	3.4130	A	1.8	
7	☐	1.000						

y = 0.0156 * x + 0.0668
R = 1.0000
DL = 0.1553 ppb
BEC = 4.291 ppb

Weight: <None>
Min Conc: <None>

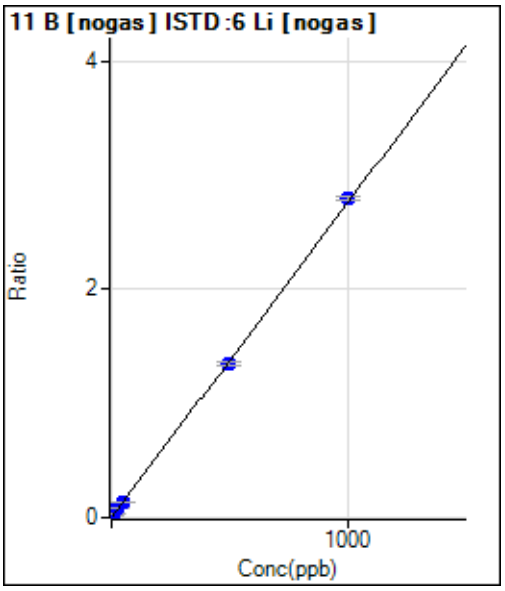


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21.67	0.0000	P	69.	
2	☐	2.000	1.949	11959.64	0.0090	P	3.0	-2.5
3	☐	5.000	4.727	28875.10	0.0218	P	2.4	-5.5
4	☐	10.000	9.298	57176.07	0.0429	P	0.7	-7.0
5	☐	100.000	98.030	576027.90	0.4522	P	1.0	-2.0
6	☐	200.000	201.027	1112225.22	0.9273	P	0.6	0.5
7	☐	1.000						

y = 0.0046 * x + 1.6245E-005
R = 0.9999
DL = 0.00739 ppb
BEC = 0.003522 ppb

Weight: <None>
Min Conc: <None>

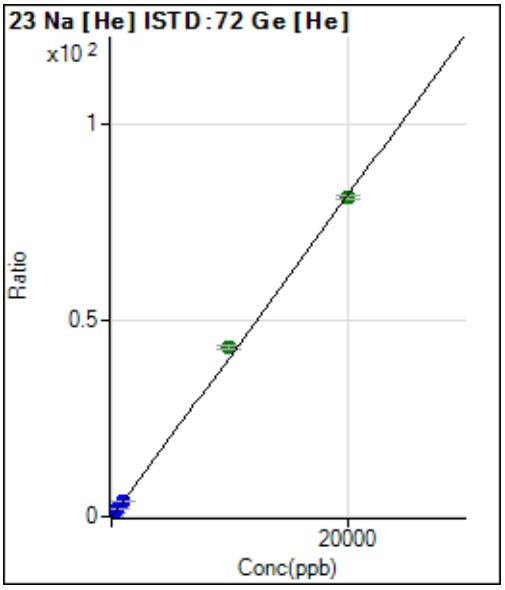
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23098.88	0.0174	P	5.6	
2	☐	10.000	8.793	55296.29	0.0416	P	0.2	-12.1
3	☐	25.000	21.847	102768.35	0.0777	P	1.5	-12.6
4	☐	50.000	44.574	187027.86	0.1403	P	0.9	-10.9
5	☐	500.000	482.629	1718155.50	1.3487	P	1.6	-3.5
6	☐	1000.000	1009.048	3359395.26	2.8008	P	0.7	0.9
7	☐	5.000						

y = 0.0028 * x + 0.0174
R = 0.9998
DL = 1.054 ppb
BEC = 6.305 ppb

Weight: <None>
Min Conc: <None>

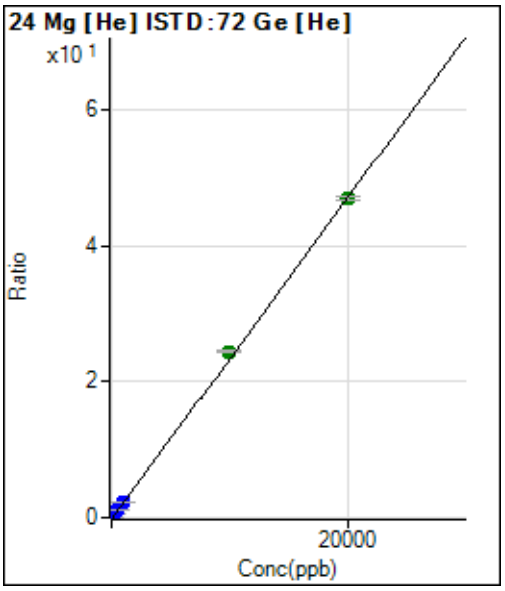


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	42030.78	0.0834	P	2.8	
2	☐	200.000	203.842	464611.58	0.9195	P	1.6	1.9
3	☐	500.000	480.749	1058980.95	2.0553	P	0.9	-3.9
4	☐	1000.000	960.389	2057439.45	4.0227	P	1.1	-4.0
5	☐	10000.00	10458.14	22378627.17	42.9795	A	1.5	4.6
6	☐	20000.00	19773.35	41855098.54	81.1877	A	1.5	-1.1
7	☐	100.000						

y = 0.0041 * x + 0.0834
R = 0.9996
DL = 1.708 ppb
BEC = 20.34 ppb

Weight: <None>
Min Conc: <None>

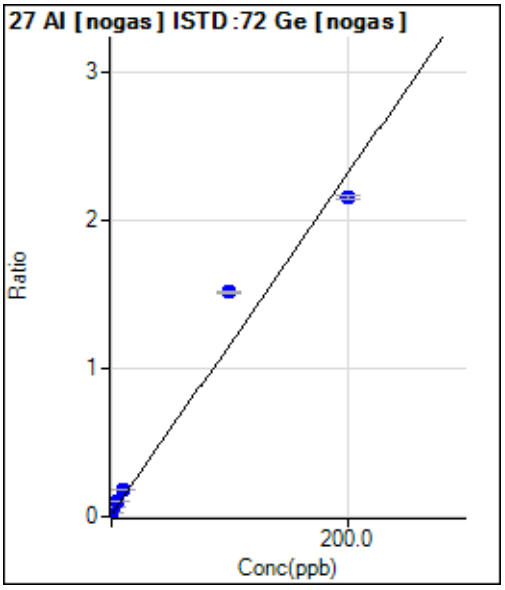
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1113.41	0.0022	P	9.0	
2	☐	200.000	201.798	242393.49	0.4798	P	1.5	0.9
3	☐	500.000	474.092	579182.15	1.1242	P	1.7	-5.2
4	☐	1000.000	947.720	1148241.49	2.2450	P	0.7	-5.2
5	☐	10000.00	10294.08	12685121.06	24.3633	A	1.2	2.9
6	☐	20000.00	19856.20	24226178.81	46.9922	A	1.5	-0.7
7	☐	100.000						

y = 0.0024 * x + 0.0022
R = 0.9998
DL = 0.2532 ppb
BEC = 0.9344 ppb

Weight: <None>
Min Conc: <None>

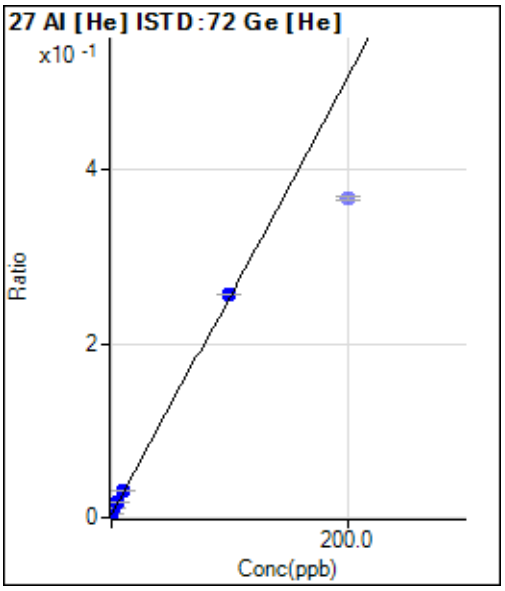


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35006.97	0.0257	P	3.9	
2	☐	2.000	3.399	88114.75	0.0648	P	2.1	69.9
3	☐	5.000	6.942	145788.63	0.1056	P	2.3	38.8
4	☐	10.000	13.783	256188.46	0.1842	P	1.6	37.8
5	☐	100.000	129.312	2148767.37	1.5126	P	1.3	29.3
6	☐	200.000	185.092	3035159.54	2.1540	P	0.8	-7.5
7	☐	1.000						

y = 0.0115 * x + 0.0257
R = 0.9845
DL = 0.2632 ppb
BEC = 2.239 ppb

Weight: <None>
Min Conc: <None>

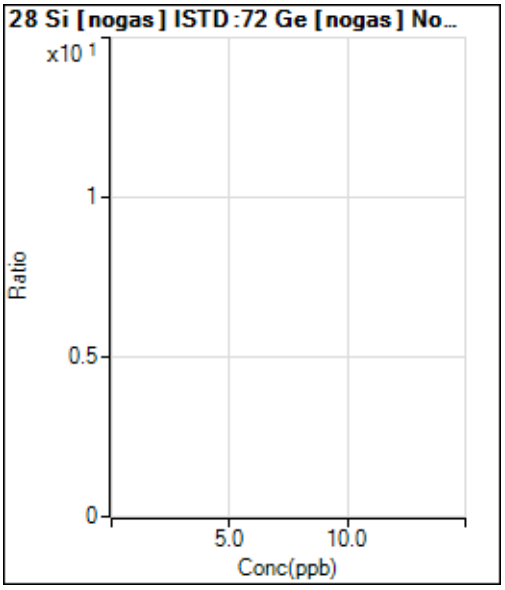
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2303.56	0.0046	P	6.4	
2	☐	2.000	2.601	5617.80	0.0111	P	3.7	30.1
3	☐	5.000	5.186	9082.88	0.0176	P	2.1	3.7
4	☐	10.000	10.336	15644.85	0.0306	P	0.4	3.4
5	☐	100.000	99.945	133350.62	0.2561	P	0.4	-0.1
6	☑	200.000		189315.82	0.3672	P	0.8	
7	☐	1.000						

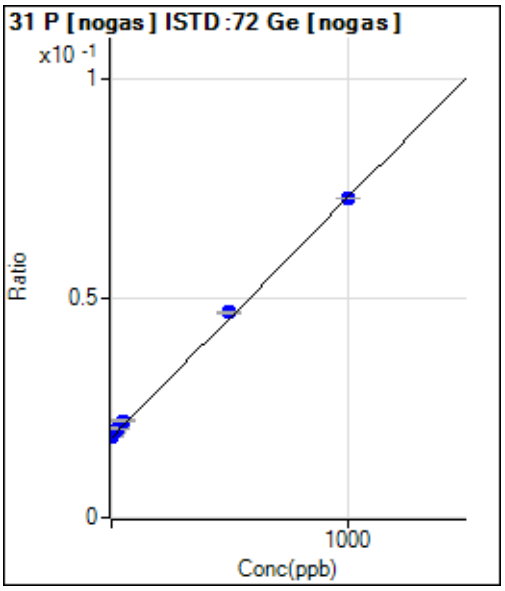
y = 0.0025 * x + 0.0046
R = 1.0000
DL = 0.3503 ppb
BEC = 1.817 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

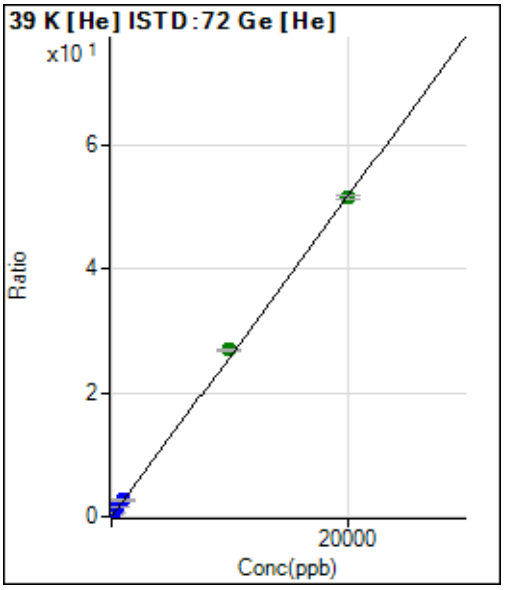
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25284.65	0.0186	P	2.2	
2	☐	10.000	16.634	26490.14	0.0195	P	1.2	66.3
3	☐	25.000	31.274	28015.87	0.0203	P	1.0	25.1
4	☐	50.000	61.589	30510.67	0.0219	P	2.3	23.2
5	☐	500.000	515.435	66413.89	0.0467	P	1.3	3.1
6	☐	1000.000	991.480	102500.96	0.0727	P	0.0	-0.9
7	☐	5.000						

y = 5.4617E-005 * x + 0.0186
R = 0.9998
DL = 22.42 ppb
BEC = 340.2 ppb

Weight: <None>
Min Conc: <None>

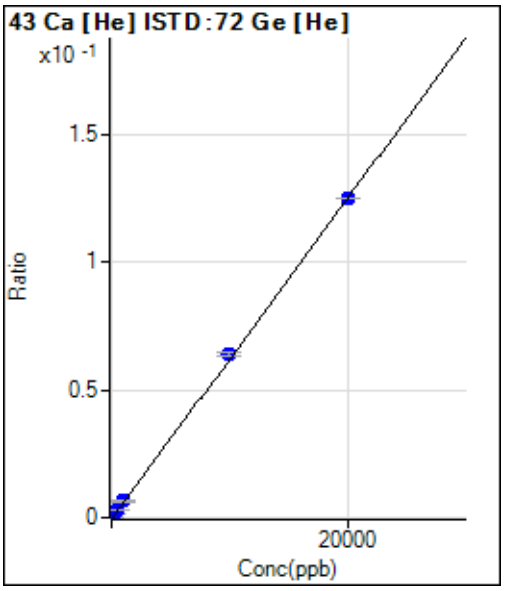


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120176.49	0.2386	P	2.1	
2	☐	200.000	194.944	375665.32	0.7436	P	1.6	-2.5
3	☐	500.000	464.544	742897.57	1.4419	P	0.8	-7.1
4	☐	1000.000	932.918	1357926.28	2.6550	P	0.9	-6.7
5	☐	10000.00	10329.12	14053346.04	26.9923	A	0.9	3.3
6	☐	20000.00	19839.72	26616130.44	51.6259	A	0.9	-0.8
7	☐	100.000						

y = 0.0026 * x + 0.2386
R = 0.9998
DL = 5.908 ppb
BEC = 92.13 ppb

Weight: <None>
Min Conc: <None>

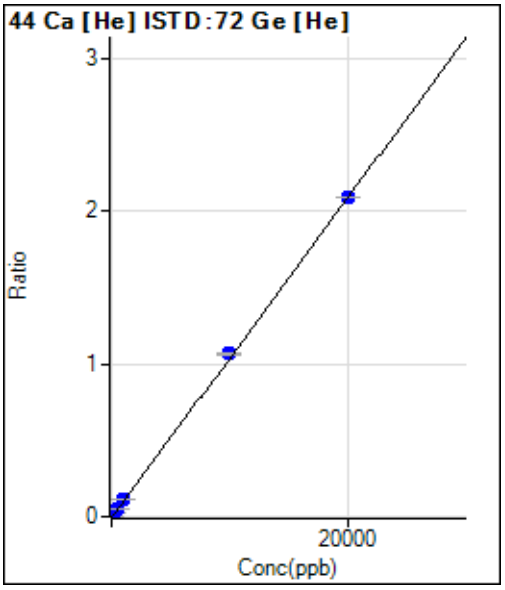
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0001	P	12.	
2	☐	200.000	206.133	696.69	0.0014	P	6.7	3.1
3	☐	500.000	510.370	1693.46	0.0033	P	3.4	2.1
4	☐	1000.000	1046.816	3403.79	0.0067	P	10.	4.7
5	☐	10000.00	10205.30	33370.22	0.0641	P	2.6	2.1
6	☐	20000.00	19894.68	64379.37	0.1249	P	0.4	-0.5
7	☐	100.000						

y = 6.2722E-006 * x + 8.5977E-005
R = 0.9999
DL = 5.101 ppb
BEC = 13.71 ppb

Weight: <None>
Min Conc: <None>

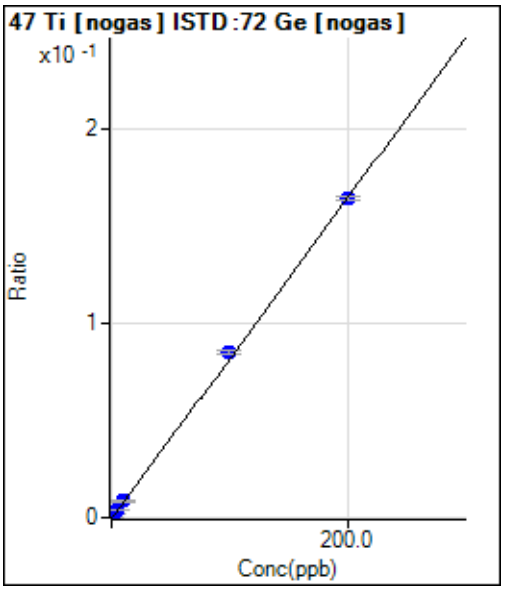


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0026	P	7.9	
2	☐	200.000	211.547	12512.03	0.0248	P	5.0	5.8
3	☐	500.000	508.262	28787.64	0.0559	P	1.5	1.7
4	☐	1000.000	1032.499	56682.28	0.1108	P	0.3	3.2
5	☐	10000.00	10135.98	554514.82	1.0650	P	0.4	1.4
6	☐	20000.00	19930.05	1078399.05	2.0916	P	0.2	-0.3
7	☐	100.000						

y = 1.0482E-004 * x + 0.0026
R = 1.0000
DL = 5.876 ppb
BEC = 24.75 ppb

Weight: <None>
Min Conc: <None>

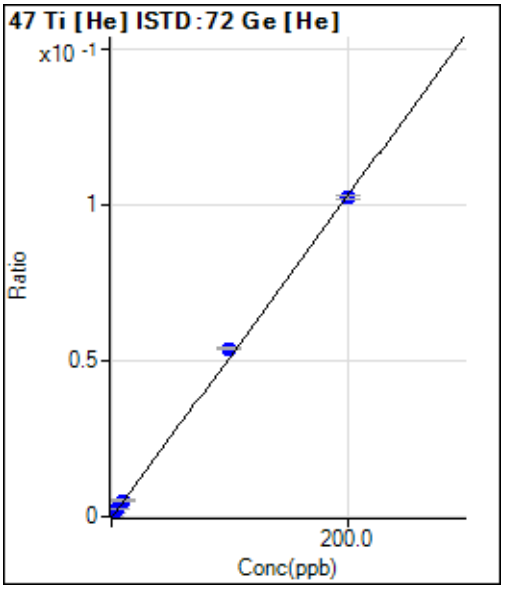
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	176.67	0.0001	P	18.	
2	☐	2.000	2.174	2626.94	0.0019	P	5.8	8.7
3	☐	5.000	5.009	5907.92	0.0043	P	3.4	0.2
4	☐	10.000	10.070	11784.80	0.0085	P	1.7	0.7
5	☐	100.000	102.695	121023.91	0.0852	P	2.6	2.7
6	☐	200.000	198.647	232073.69	0.1647	P	1.0	-0.7
7	☐	1.000						

y = 8.2845E-004 * x + 1.2990E-004
R = 0.9999
DL = 0.08734 ppb
BEC = 0.1568 ppb

Weight: <None>
Min Conc: <None>

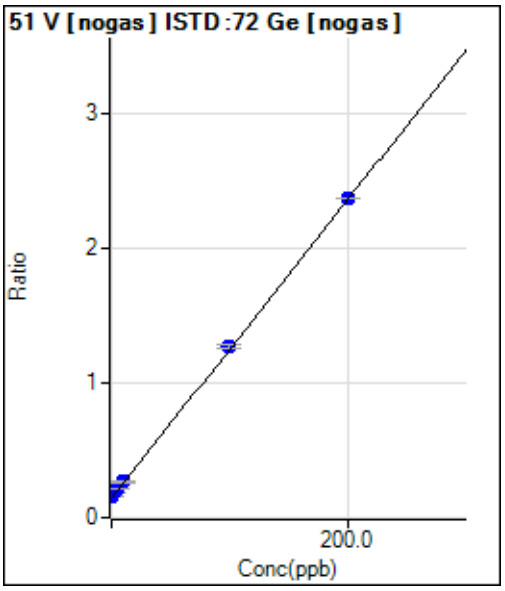


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	11.	
2	☐	2.000	2.096	603.35	0.0012	P	18.	4.8
3	☐	5.000	4.515	1260.08	0.0024	P	11.	-9.7
4	☐	10.000	9.618	2596.94	0.0051	P	9.8	-3.8
5	☐	100.000	104.136	28059.67	0.0539	P	1.9	4.1
6	☐	200.000	197.962	52772.27	0.1023	P	1.0	-1.0
7	☐	1.000						

y = 5.1645E-004 * x + 1.1258E-004
R = 0.9997
DL = 0.07192 ppb
BEC = 0.218 ppb

Weight: <None>
Min Conc: <None>

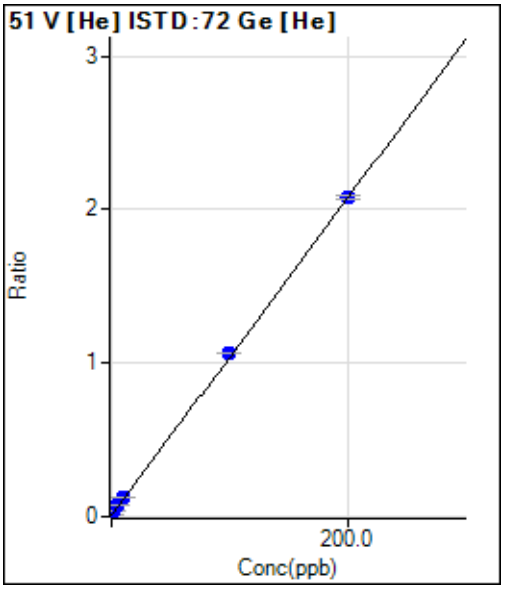
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	212615.13	0.1562	P	1.0	
2	☐	2.000	2.732	253467.02	0.1865	P	0.9	36.6
3	☐	5.000	5.390	298085.45	0.2159	P	1.0	7.8
4	☐	10.000	9.838	368460.25	0.2650	P	2.3	-1.6
5	☐	100.000	100.247	1796668.15	1.2650	P	2.0	0.2
6	☐	200.000	199.867	3335309.84	2.3668	P	0.3	-0.1
7	☐	1.000						

y = 0.0111 * x + 0.1562
R = 1.0000
DL = 0.4257 ppb
BEC = 14.13 ppb

Weight: <None>
Min Conc: <None>

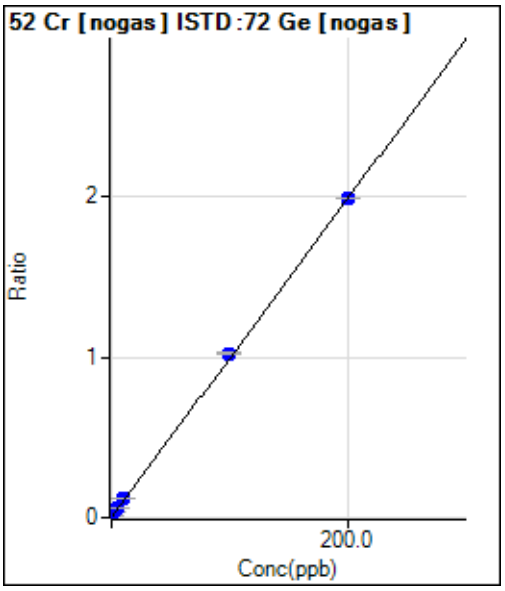


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9178.38	0.0182	P	3.0	
2	☐	2.000	2.155	20471.68	0.0405	P	2.0	7.7
3	☐	5.000	4.948	35772.16	0.0694	P	0.8	-1.0
4	☐	10.000	10.067	62600.83	0.1224	P	1.2	0.7
5	☐	100.000	101.281	555155.29	1.0663	P	0.3	1.3
6	☐	200.000	199.356	1072923.71	2.0811	P	1.1	-0.3
7	☐	1.000						

y = 0.0103 * x + 0.0182
R = 1.0000
DL = 0.1586 ppb
BEC = 1.761 ppb

Weight: <None>
Min Conc: <None>

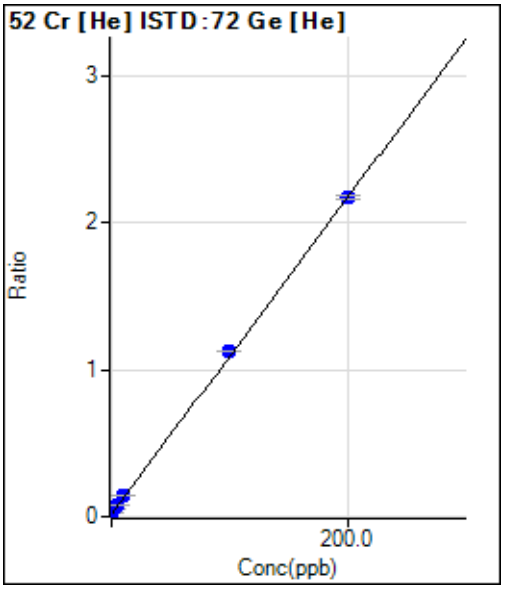
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17744.08	0.0130	P	4.0	
2	☐	2.000	2.214	47568.41	0.0350	P	1.7	10.7
3	☐	5.000	5.186	89034.53	0.0645	P	1.2	3.7
4	☐	10.000	10.611	164455.85	0.1183	P	1.4	6.1
5	☐	100.000	101.624	1450305.14	1.0209	P	1.5	1.6
6	☐	200.000	199.151	2801910.06	1.9882	P	0.4	-0.4
7	☐	1.000						

y = 0.0099 * x + 0.0130
R = 1.0000
DL = 0.1591 ppb
BEC = 1.315 ppb

Weight: <None>
Min Conc: <None>

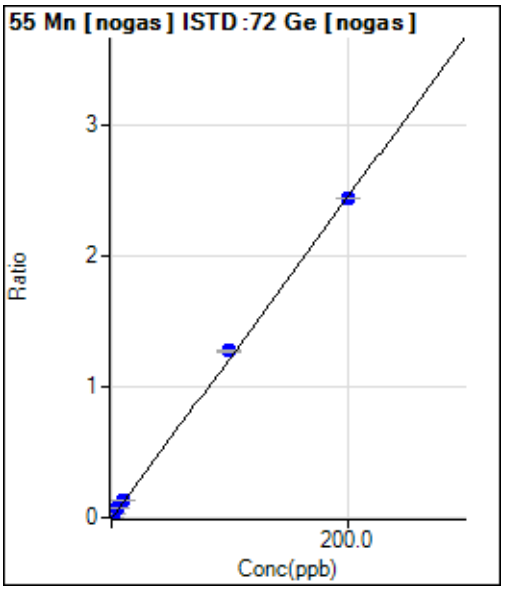


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14073.46	0.0280	P	6.6	
2	☐	2.000	2.167	25932.66	0.0513	P	2.2	8.4
3	☐	5.000	5.143	42981.46	0.0834	P	1.3	2.9
4	☐	10.000	10.761	73652.84	0.1440	P	1.4	7.6
5	☐	100.000	101.968	587063.91	1.1275	P	0.5	2.0
6	☐	200.000	198.973	1120598.03	2.1736	P	1.7	-0.5
7	☐	1.000						

y = 0.0108 * x + 0.0280
R = 0.9999
DL = 0.5113 ppb
BEC = 2.592 ppb

Weight: <None>
Min Conc: <None>

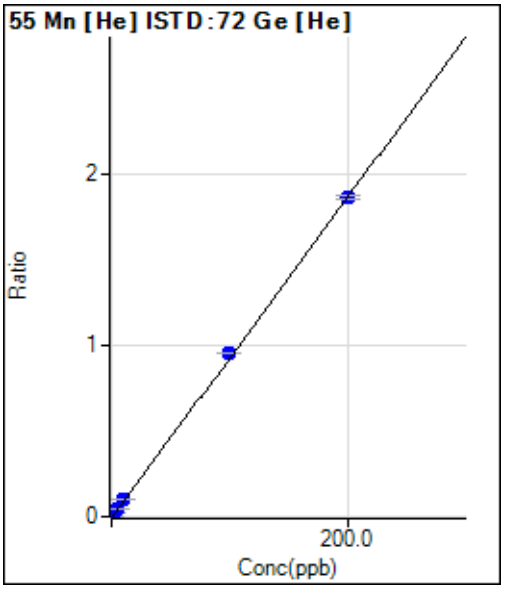
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5984.65	0.0044	P	5.4	
2	☐	2.000	2.273	43971.08	0.0323	P	1.7	13.6
3	☐	5.000	5.310	96249.23	0.0697	P	2.1	6.2
4	☐	10.000	10.587	187159.46	0.1346	P	0.5	5.9
5	☐	100.000	103.439	1813235.91	1.2764	P	1.5	3.4
6	☐	200.000	198.240	3441843.91	2.4421	P	0.4	-0.9
7	☐	1.000						

y = 0.0123 * x + 0.0044
R = 0.9998
DL = 0.05831 ppb
BEC = 0.3579 ppb

Weight: <None>
Min Conc: <None>

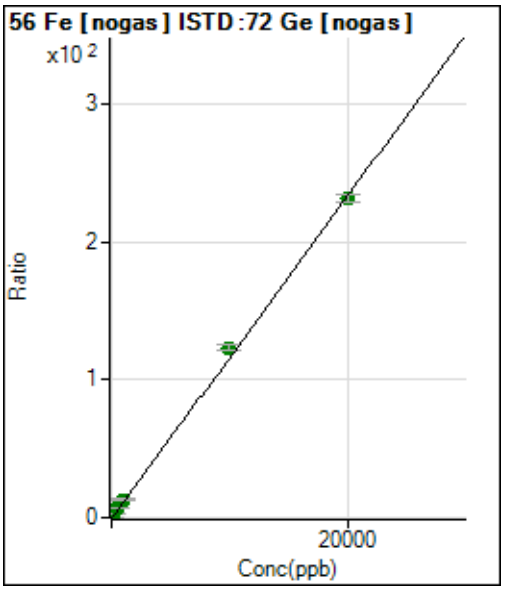


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	526.68	0.0010	P	13.	
2	☐	2.000	2.228	11047.53	0.0219	P	2.3	11.4
3	☐	5.000	5.168	25421.74	0.0493	P	4.3	3.4
4	☐	10.000	10.434	50407.83	0.0986	P	1.0	4.3
5	☐	100.000	102.044	497049.93	0.9546	P	0.5	2.0
6	☐	200.000	198.950	959035.48	1.8602	P	1.6	-0.5
7	☐	1.000						

y = 0.0093 * x + 0.0010
R = 0.9999
DL = 0.0435 ppb
BEC = 0.112 ppb

Weight: <None>
Min Conc: <None>

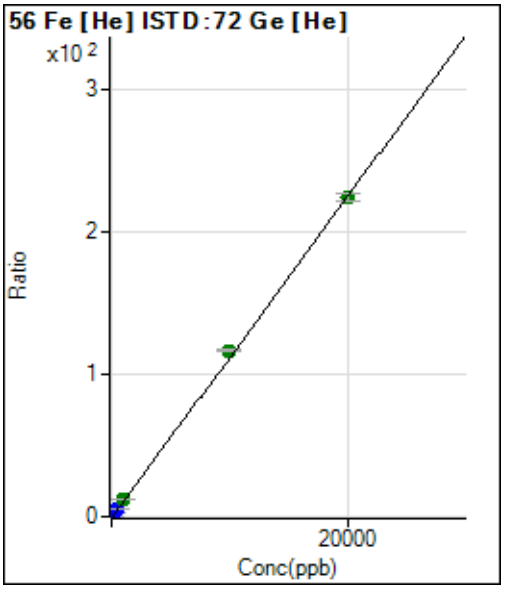
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	543264.50	0.3993	P	1.7	
2	☐	200.000	239.379	4356138.58	3.2045	A	1.3	19.7
3	☐	500.000	556.061	9549243.40	6.9155	A	0.8	11.2
4	☐	1000.000	1089.377	18303409.73	13.1651	A	1.8	8.9
5	☐	10000.00	10504.29	175371204.0	123.493	A	2.7	5.0
6	☐	20000.00	19741.58	326410355.1	231.739	A	2.8	-1.3
7	☐	100.000						

y = 0.0117 * x + 0.3993
R = 0.9996
DL = 1.718 ppb
BEC = 34.08 ppb

Weight: <None>
Min Conc: <None>

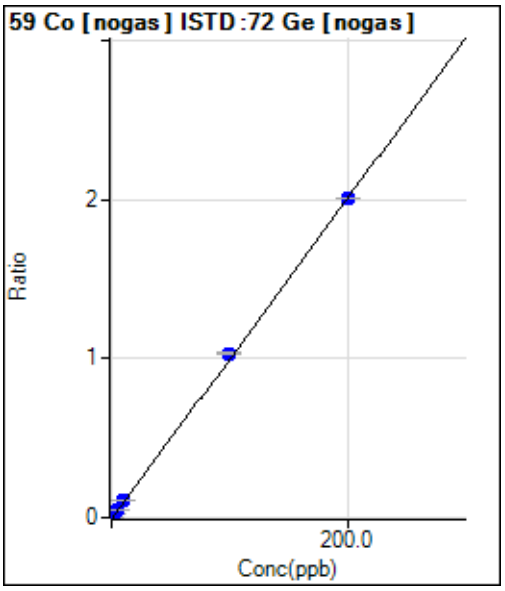


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19853.53	0.0394	P	3.2	
2	☐	200.000	195.295	1135801.05	2.2481	P	1.5	-2.4
3	☐	500.000	457.522	2686307.15	5.2137	P	0.6	-8.5
4	☐	1000.000	1083.490	6287651.78	12.2930	A	0.1	8.3
5	☐	10000.00	10329.06	60842164.09	116.854	A	0.4	3.3
6	☐	20000.00	19832.40	115651948.2	224.330	A	2.0	-0.8
7	☐	100.000						

y = 0.0113 * x + 0.0394
R = 0.9998
DL = 0.3324 ppb
BEC = 3.486 ppb

Weight: <None>
Min Conc: <None>

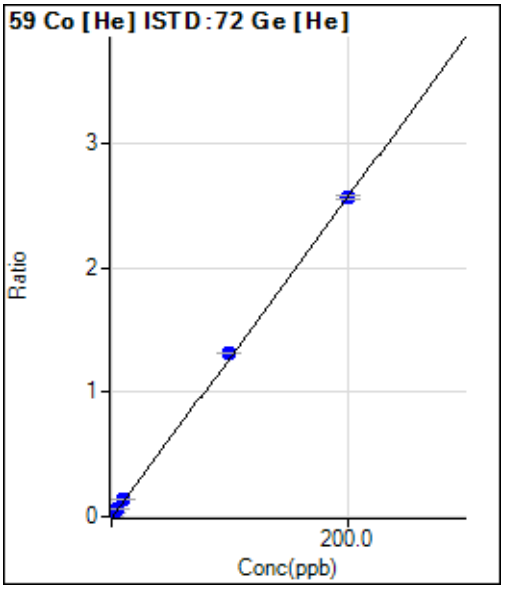
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	4.7	
2	☐	2.000	2.209	30477.93	0.0224	P	2.5	10.4
3	☐	5.000	5.264	73559.53	0.0533	P	0.9	5.3
4	☐	10.000	10.441	146779.96	0.1056	P	0.4	4.4
5	☐	100.000	102.147	1465755.03	1.0317	P	1.2	2.1
6	☐	200.000	198.896	2830888.50	2.0087	P	0.4	-0.6
7	☐	1.000						

y = 0.0101 * x + 1.1017E-004
R = 0.9999
DL = 0.001554 ppb
BEC = 0.01091 ppb

Weight: <None>
Min Conc: <None>

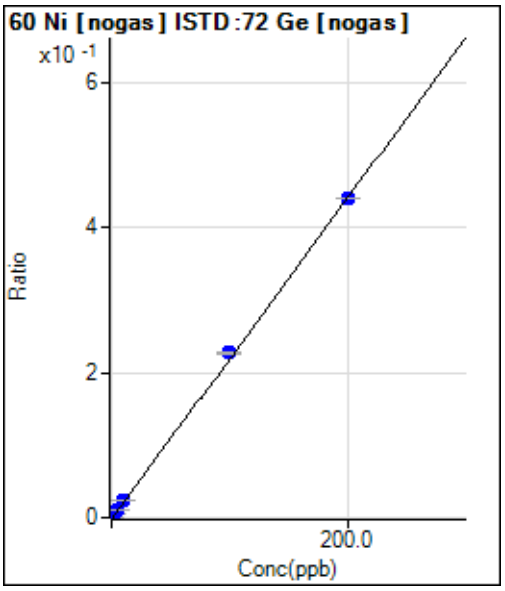


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	99.	
2	☐	2.000	2.204	14410.48	0.0285	P	3.3	10.2
3	☐	5.000	5.254	35007.62	0.0679	P	1.9	5.1
4	☐	10.000	10.462	69179.26	0.1353	P	1.1	4.6
5	☐	100.000	102.024	686510.83	1.3186	P	0.8	2.0
6	☐	200.000	198.956	1325589.77	2.5713	P	1.5	-0.5
7	☐	1.000						

y = 0.0129 * x + 4.6405E-005
R = 0.9999
DL = 0.01069 ppb
BEC = 0.003591 ppb

Weight: <None>
Min Conc: <None>

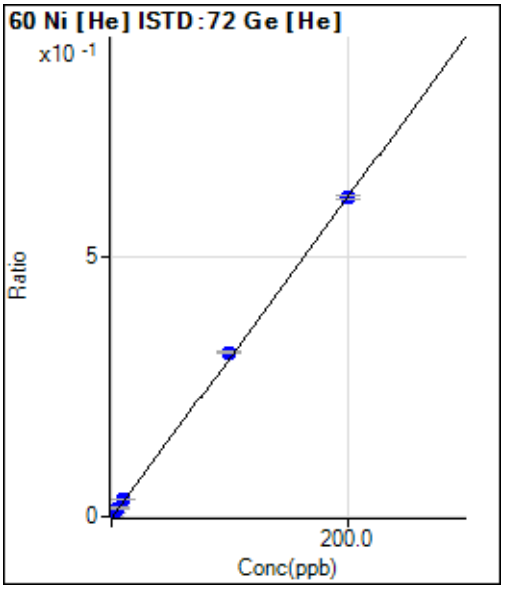
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	350.01	0.0003	P	24.	
2	☐	2.000	2.379	7515.32	0.0055	P	2.2	19.0
3	☐	5.000	5.123	16022.11	0.0116	P	2.7	2.5
4	☐	10.000	10.448	32542.19	0.0234	P	2.4	4.5
5	☐	100.000	102.614	323229.41	0.2275	P	1.5	2.6
6	☐	200.000	198.664	620353.41	0.4402	P	0.3	-0.7
7	☐	1.000						

y = 0.0022 * x + 2.5794E-004
R = 0.9999
DL = 0.0843 ppb
BEC = 0.1165 ppb

Weight: <None>
Min Conc: <None>

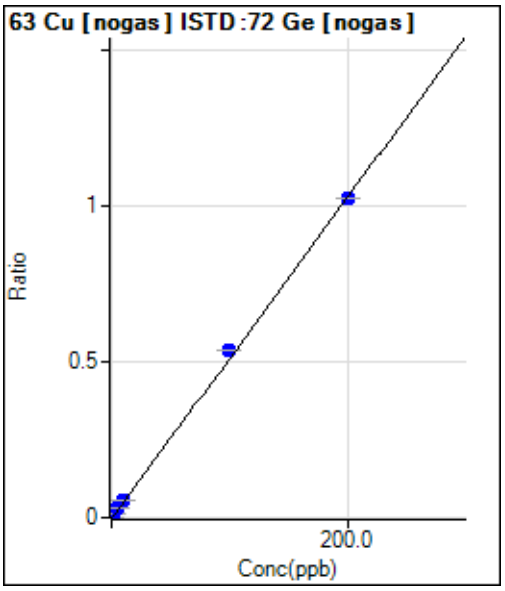


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	166.67	0.0003	P	34.	
2	☐	2.000	2.333	3800.54	0.0075	P	2.9	16.6
3	☐	5.000	5.256	8519.23	0.0165	P	4.0	5.1
4	☐	10.000	10.737	17096.62	0.0334	P	3.3	7.4
5	☐	100.000	102.151	164138.46	0.3153	P	0.5	2.2
6	☐	200.000	198.878	316274.53	0.6135	P	0.7	-0.6
7	☐	1.000						

y = 0.0031 * x + 3.3076E-004
R = 0.9999
DL = 0.111 ppb
BEC = 0.1073 ppb

Weight: <None>
Min Conc: <None>

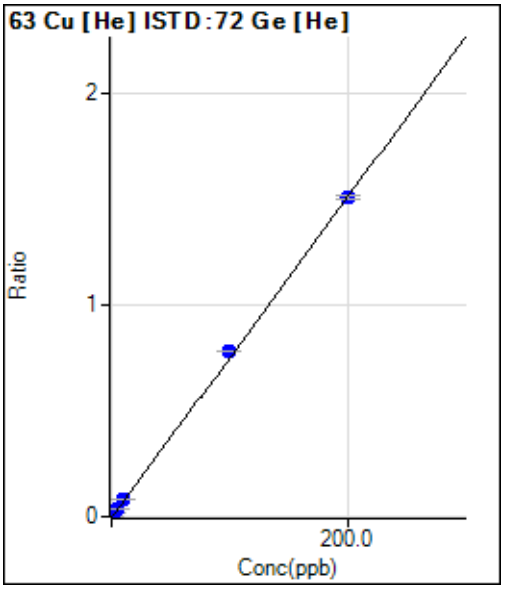
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1866.82	0.0014	P	3.6	
2	☐	2.000	2.336	18274.74	0.0134	P	2.0	16.8
3	☐	5.000	5.244	39311.84	0.0285	P	0.3	4.9
4	☐	10.000	10.538	77647.24	0.0558	P	1.2	5.4
5	☐	100.000	103.606	762677.18	0.5368	P	0.9	3.6
6	☐	200.000	198.160	1445057.63	1.0254	P	0.1	-0.9
7	☐	1.000						

y = 0.0052 * x + 0.0014
R = 0.9998
DL = 0.02884 ppb
BEC = 0.2655 ppb

Weight: <None>
Min Conc: <None>

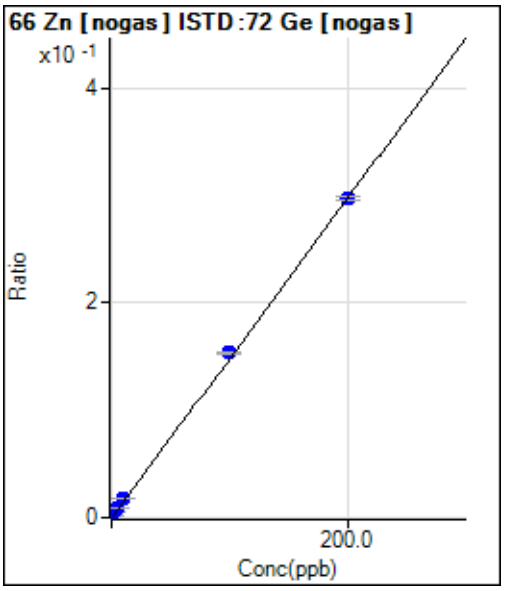


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1036.72	0.0021	P	3.3	
2	☐	2.000	2.280	9796.70	0.0194	P	4.0	14.0
3	☐	5.000	5.071	20918.18	0.0406	P	0.9	1.4
4	☐	10.000	10.398	41467.71	0.0811	P	1.9	4.0
5	☐	100.000	102.535	406773.82	0.7813	P	0.6	2.5
6	☐	200.000	198.708	779572.05	1.5121	P	1.0	-0.6
7	☐	1.000						

y = 0.0076 * x + 0.0021
R = 0.9999
DL = 0.02685 ppb
BEC = 0.2709 ppb

Weight: <None>
Min Conc: <None>

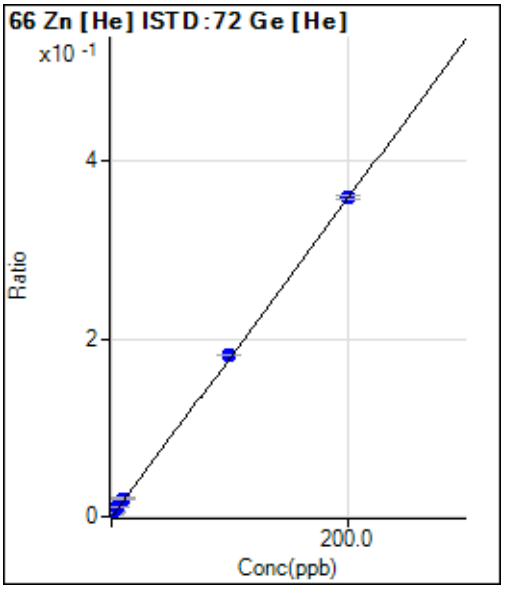
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1330.09	0.0010	P	15.	
2	☐	2.000	2.667	6731.64	0.0050	P	7.5	33.3
3	☐	5.000	5.352	12371.97	0.0090	P	1.8	7.0
4	☐	10.000	10.839	23842.62	0.0171	P	1.3	8.4
5	☐	100.000	102.179	217921.49	0.1533	P	1.1	2.2
6	☐	200.000	198.853	419245.32	0.2975	P	0.8	-0.6
7	☐	1.000						

y = 0.0015 * x + 9.7880E-004
R = 0.9999
DL = 0.2951 ppb
BEC = 0.6564 ppb

Weight: <None>
Min Conc: <None>

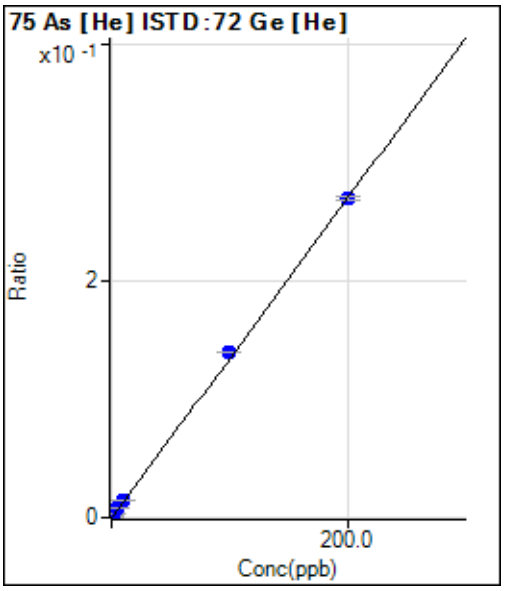


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0013	P	7.6	
2	☐	2.000	2.389	2796.97	0.0055	P	6.1	19.4
3	☐	5.000	5.398	5637.82	0.0109	P	5.2	8.0
4	☐	10.000	10.656	10420.45	0.0204	P	5.0	6.6
5	☐	100.000	100.618	94678.12	0.1818	P	0.6	0.6
6	☐	200.000	199.645	185389.64	0.3596	P	0.9	-0.2
7	☐	1.000						

y = 0.0018 * x + 0.0013
R = 1.0000
DL = 0.1581 ppb
BEC = 0.6967 ppb

Weight: <None>
Min Conc: <None>

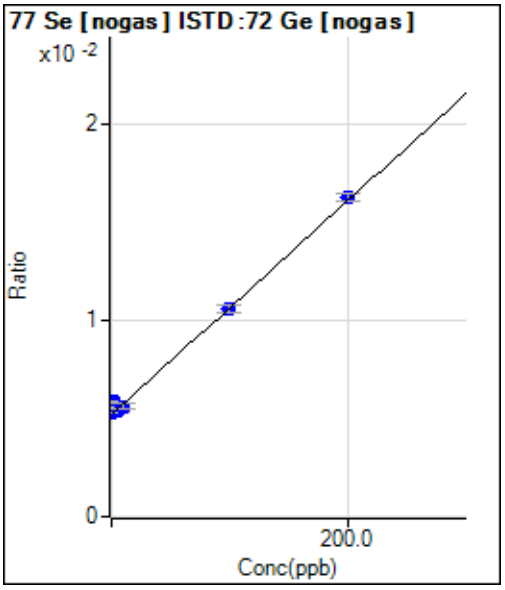
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	396.67	0.0008	P	13.	
2	☐	2.000	2.172	1886.80	0.0037	P	8.1	8.6
3	☐	5.000	5.045	3931.66	0.0076	P	4.1	0.9
4	☐	10.000	10.192	7474.13	0.0146	P	2.2	1.9
5	☐	100.000	102.516	72825.94	0.1399	P	0.6	2.5
6	☐	200.000	198.729	139404.95	0.2704	P	1.5	-0.6
7	☐	1.000						

y = 0.0014 * x + 7.8707E-004
R = 0.9999
DL = 0.2398 ppb
BEC = 0.5801 ppb

Weight: <None>
Min Conc: <None>

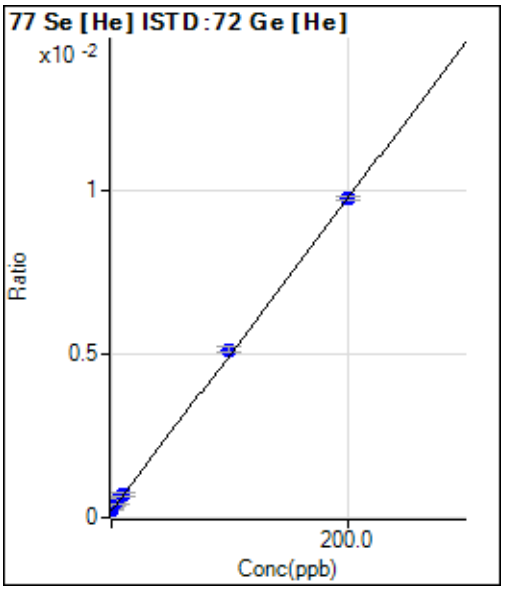


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7188.53	0.0053	P	3.6	
2	☐	2.000	10.206	7938.89	0.0058	P	1.1	410.
3	☐	5.000	2.238	7468.66	0.0054	P	6.0	-55.2
4	☐	10.000	5.676	7782.15	0.0056	P	5.4	-43.2
5	☐	100.000	96.678	14971.14	0.0105	P	3.8	-3.3
6	☐	200.000	201.864	22911.21	0.0163	P	2.9	0.9
7	☐	1.000						

y = 5.4399E-005 * x + 0.0053
R = 0.9984
DL = 10.6 ppb
BEC = 97.15 ppb

Weight: <None>
Min Conc: <None>

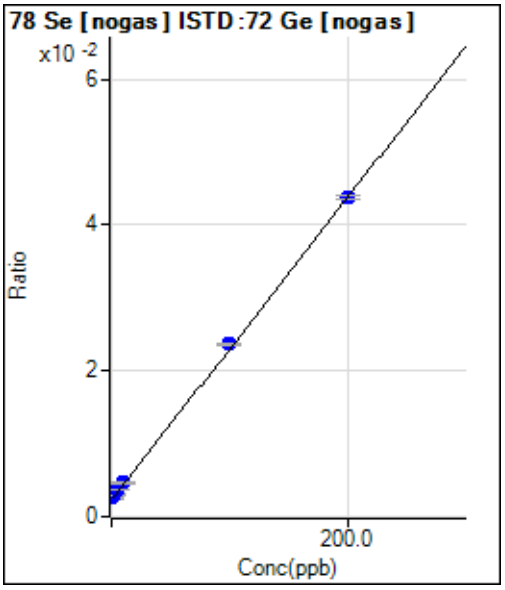
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0003	P	8.0	
2	☐	2.000	3.265	210.01	0.0004	P	32.	63.3
3	☐	5.000	5.136	260.01	0.0005	P	33.	2.7
4	☐	10.000	9.162	356.68	0.0007	P	11.	-8.4
5	☐	100.000	102.221	2683.63	0.0052	P	4.2	2.2
6	☐	200.000	198.915	5044.28	0.0098	P	1.3	-0.5
7	☐	1.000						

y = 4.7890E-005 * x + 2.5816E-004
R = 0.9999
DL = 1.293 ppb
BEC = 5.391 ppb

Weight: <None>
Min Conc: <None>

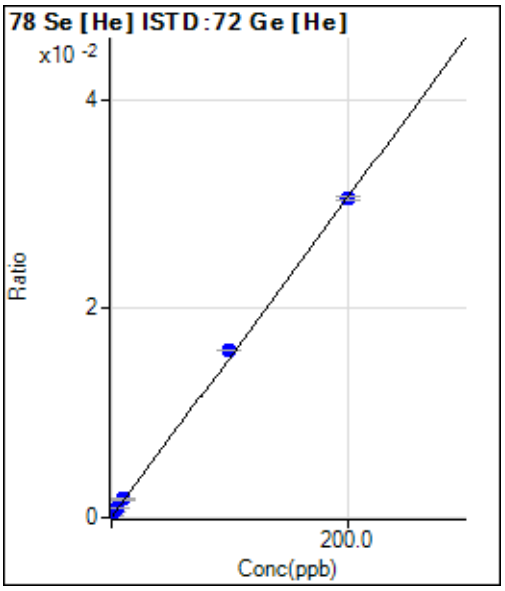


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3410.45	0.0025	P	5.8	
2	☐	2.000	2.396	4087.31	0.0030	P	3.8	19.8
3	☐	5.000	5.545	5050.99	0.0037	P	3.8	10.9
4	☐	10.000	10.553	6531.56	0.0047	P	5.3	5.5
5	☐	100.000	102.028	33658.60	0.0237	P	1.4	2.0
6	☐	200.000	198.941	61721.67	0.0438	P	0.6	-0.5
7	☐	1.000						

y = 2.0752E-004 * x + 0.0025
R = 0.9999
DL = 2.086 ppb
BEC = 12.09 ppb

Weight: <None>
Min Conc: <None>

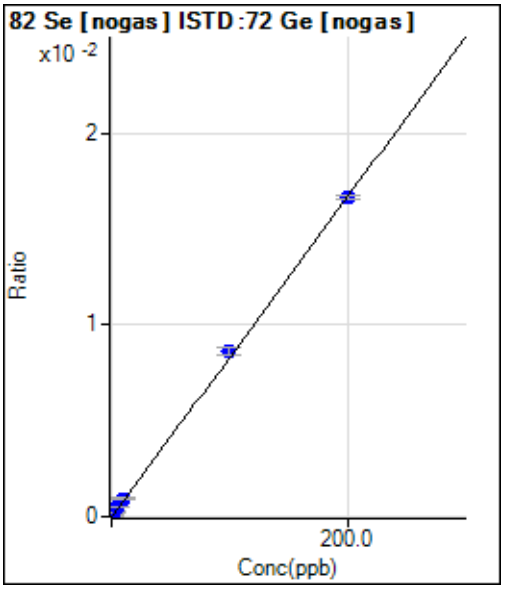
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0002	P	6.3	
2	☐	2.000	2.357	286.00	0.0006	P	13.	17.9
3	☐	5.000	5.029	502.68	0.0010	P	3.3	0.6
4	☐	10.000	10.160	900.70	0.0018	P	5.6	1.6
5	☐	100.000	103.247	8341.02	0.0160	P	0.8	3.2
6	☐	200.000	198.364	15769.70	0.0306	P	1.5	-0.8
7	☐	1.000						

y = 1.5317E-004 * x + 2.0523E-004
R = 0.9998
DL = 0.2516 ppb
BEC = 1.34 ppb

Weight: <None>
Min Conc: <None>

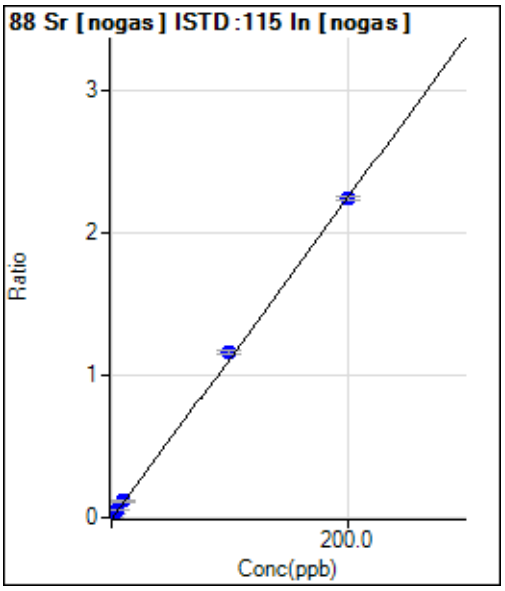


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	66.67	0.0000	P	29.	
2	☐	2.000	2.167	313.34	0.0002	P	28.	8.3
3	☐	5.000	5.538	706.70	0.0005	P	7.1	10.8
4	☐	10.000	10.458	1283.41	0.0009	P	9.7	4.6
5	☐	100.000	102.835	12271.94	0.0086	P	4.6	2.8
6	☐	200.000	198.545	23459.04	0.0166	P	1.4	-0.7
7	☐	1.000						

y = 8.3577E-005 * x + 4.8816E-005
R = 0.9999
DL = 0.5126 ppb
BEC = 0.5841 ppb

Weight: <None>
Min Conc: <None>

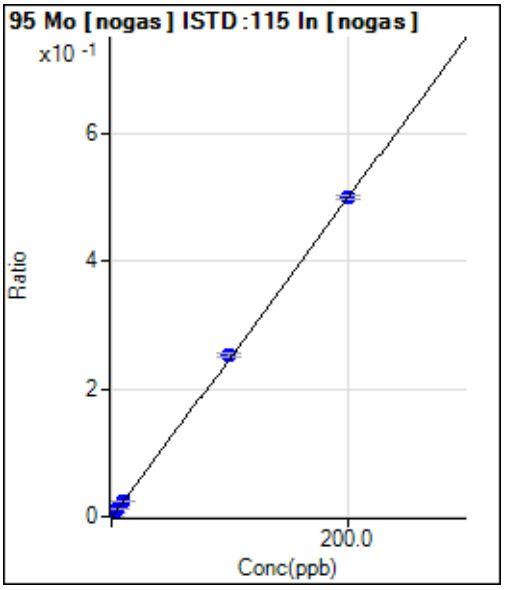
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.68	0.0003	P	9.8	
2	☐	2.000	2.146	35162.42	0.0245	P	1.8	7.3
3	☐	5.000	5.090	83995.47	0.0577	P	3.4	1.8
4	☐	10.000	10.166	168299.82	0.1149	P	3.6	1.7
5	☐	100.000	102.853	1723891.17	1.1600	P	2.3	2.9
6	☐	200.000	198.561	3331933.91	2.2392	P	1.6	-0.7
7	☐	1.000						

y = 0.0113 * x + 3.1290E-004
R = 0.9999
DL = 0.008123 ppb
BEC = 0.02775 ppb

Weight: <None>
Min Conc: <None>

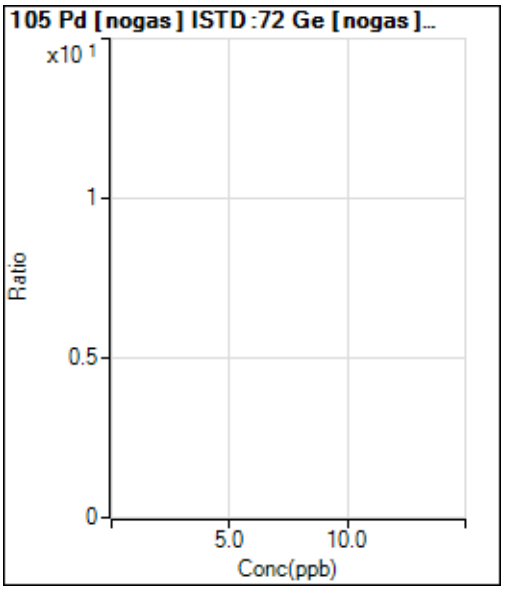


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	263.34	0.0002	P	27.	
2	☐	2.000	2.074	7715.51	0.0054	P	3.2	3.7
3	☐	5.000	5.037	18632.07	0.0128	P	3.1	0.7
4	☐	10.000	9.937	36712.83	0.0251	P	3.1	-0.6
5	☐	100.000	101.087	376531.91	0.2534	P	2.5	1.1
6	☐	200.000	199.458	743598.01	0.4998	P	1.1	-0.3
7	☐	1.000						

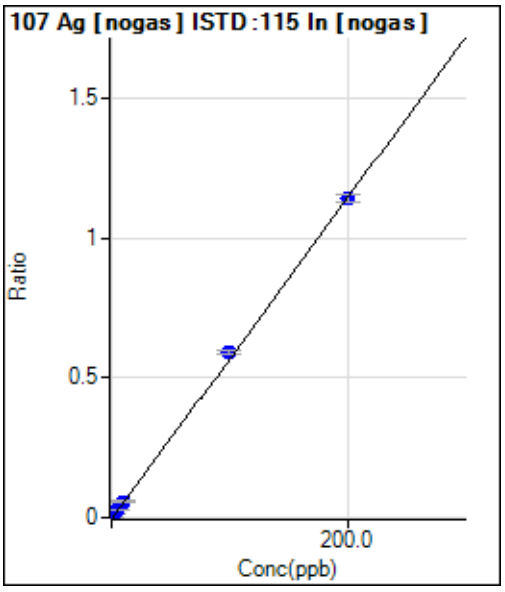
y = 0.0025 * x + 1.8410E-004
R = 1.0000
DL = 0.06131 ppb
BEC = 0.0735 ppb

Weight: <None>
Min Conc: <None>

Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

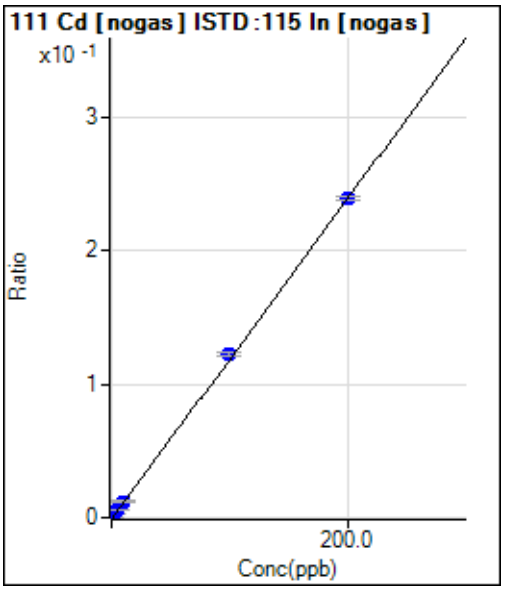


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120.00	0.0001	P	21.	
2	☐	2.000	2.180	18124.89	0.0126	P	3.4	9.0
3	☐	5.000	5.105	42906.91	0.0295	P	2.5	2.1
4	☐	10.000	10.085	85158.40	0.0582	P	2.8	0.9
5	☐	100.000	102.870	880260.77	0.5924	P	1.3	2.9
6	☐	200.000	198.556	1701530.23	1.1434	P	2.3	-0.7
7	☐	1.000						

y = 0.0058 * x + 8.4000E-005
R = 0.9999
DL = 0.009549 ppb
BEC = 0.01459 ppb

Weight: <None>
Min Conc: <None>

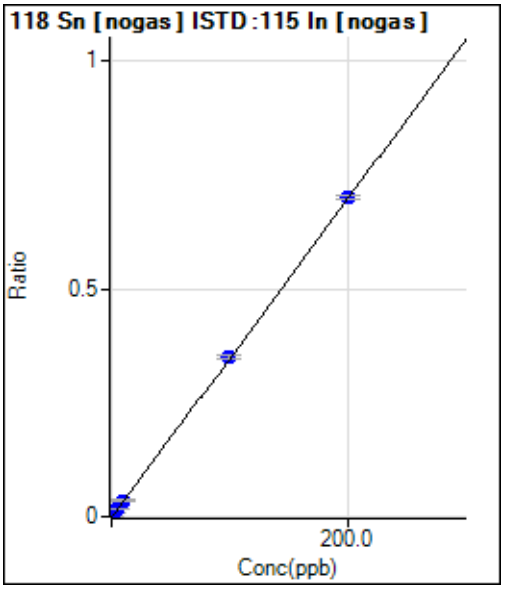
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.	
2	☐	2.000	2.139	3710.55	0.0026	P	6.8	7.0
3	☐	5.000	5.133	9009.64	0.0062	P	3.9	2.7
4	☐	10.000	10.076	17774.49	0.0121	P	4.7	0.8
5	☐	100.000	101.857	182202.05	0.1226	P	1.9	1.9
6	☐	200.000	199.063	356536.01	0.2396	P	1.4	-0.5
7	☐	1.000						

y = 0.0012 * x + 1.1743E-005
R = 0.9999
DL = 0.02689 ppb
BEC = 0.009756 ppb

Weight: <None>
Min Conc: <None>

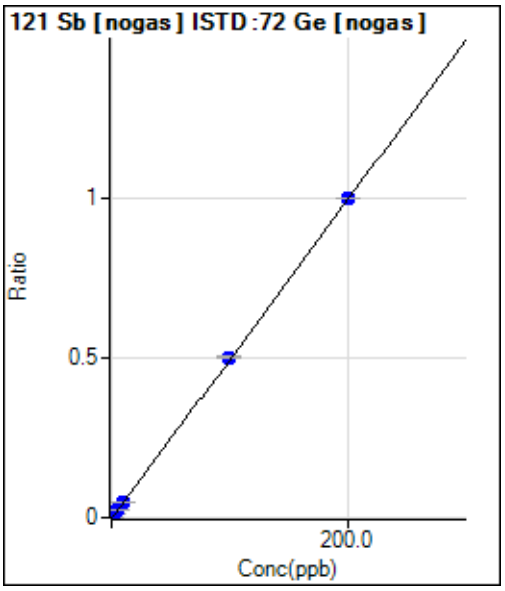


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1923.50	0.0013	P	7.3	
2	☐	2.000	2.089	12428.91	0.0087	P	3.9	4.5
3	☐	5.000	4.782	26347.78	0.0181	P	3.8	-4.4
4	☐	10.000	9.750	51980.46	0.0355	P	4.5	-2.5
5	☐	100.000	100.073	523005.88	0.3519	P	3.0	0.1
6	☐	200.000	199.981	1044415.06	0.7019	P	1.5	0.0
7	☐	1.000						

y = 0.0035 * x + 0.0013
R = 1.0000
DL = 0.08459 ppb
BEC = 0.3846 ppb

Weight: <None>
Min Conc: <None>

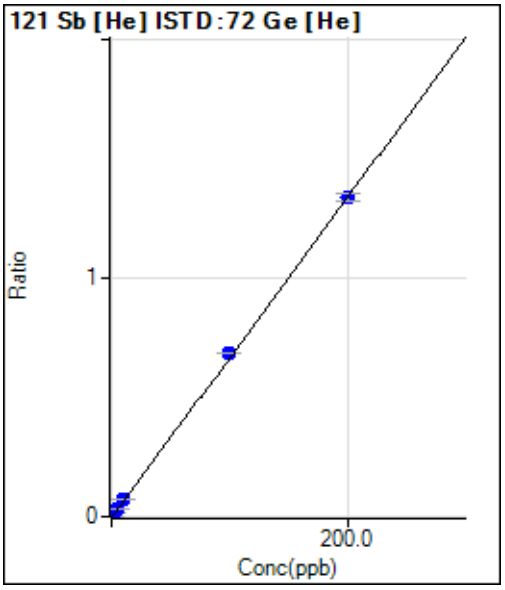
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1603.45	0.0012	P	5.4	
2	☐	2.000	2.052	15518.58	0.0114	P	1.2	2.6
3	☐	5.000	4.963	35808.08	0.0259	P	1.9	-0.7
4	☐	10.000	9.923	70454.90	0.0507	P	1.5	-0.8
5	☐	100.000	100.223	712025.38	0.5011	P	1.2	0.2
6	☐	200.000	199.893	1406823.42	0.9982	P	0.4	-0.1
7	☐	1.000						

y = 0.0050 * x + 0.0012
R = 1.0000
DL = 0.0386 ppb
BEC = 0.2364 ppb

Weight: <None>
Min Conc: <None>

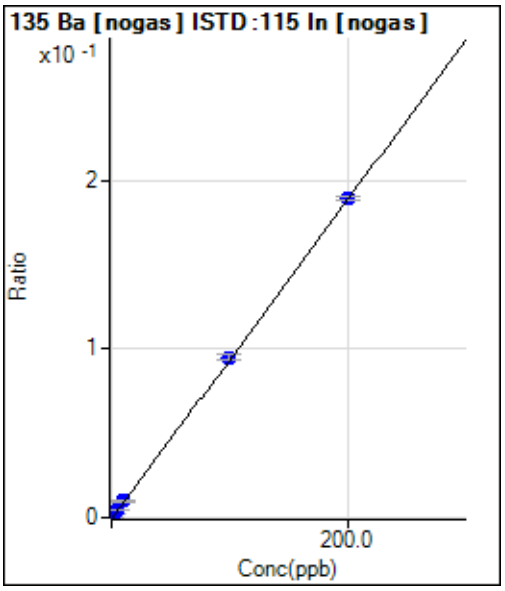


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	976.72	0.0019	P	6.9	
2	☐	2.000	2.002	7778.90	0.0154	P	4.4	0.1
3	☐	5.000	4.881	17901.41	0.0347	P	3.3	-2.4
4	☐	10.000	10.127	35801.42	0.0700	P	1.6	1.3
5	☐	100.000	102.157	358468.06	0.6885	P	0.2	2.2
6	☐	200.000	198.918	690181.78	1.3388	P	1.9	-0.5
7	☐	1.000						

y = 0.0067 * x + 0.0019
R = 0.9999
DL = 0.05941 ppb
BEC = 0.2887 ppb

Weight: <None>
Min Conc: <None>

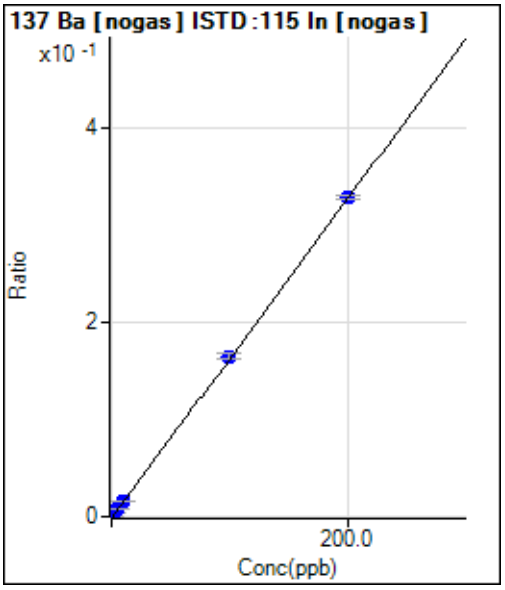
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	27.	
2	☐	2.000	2.169	2993.70	0.0021	P	8.8	8.5
3	☐	5.000	5.028	6981.80	0.0048	P	4.1	0.6
4	☐	10.000	10.240	14257.37	0.0097	P	6.6	2.4
5	☐	100.000	100.370	141459.89	0.0952	P	2.7	0.4
6	☐	200.000	199.801	281879.07	0.1895	P	1.3	-0.1
7	☐	1.000						

y = 9.4805E-004 * x + 3.0392E-005
R = 1.0000
DL = 0.02633 ppb
BEC = 0.03206 ppb

Weight: <None>
Min Conc: <None>

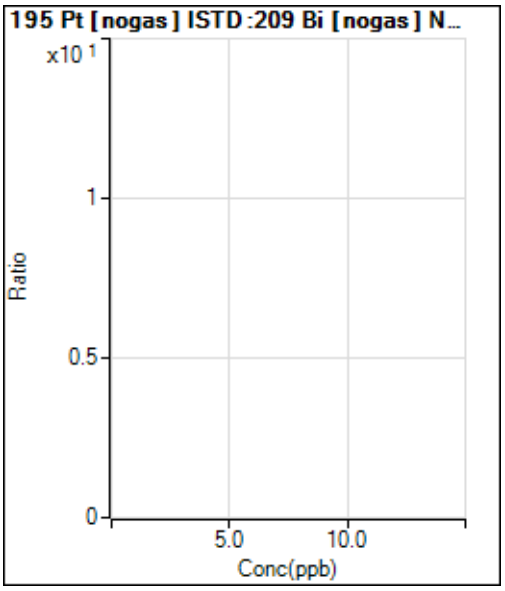


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	40.	
2	☐	2.000	2.078	4994.29	0.0035	P	2.7	3.9
3	☐	5.000	4.824	11631.59	0.0080	P	4.6	-3.5
4	☐	10.000	9.965	24063.92	0.0164	P	2.1	-0.3
5	☐	100.000	100.466	245259.55	0.1650	P	2.6	0.5
6	☐	200.000	199.772	488203.18	0.3281	P	1.6	-0.1
7	☐	1.000						

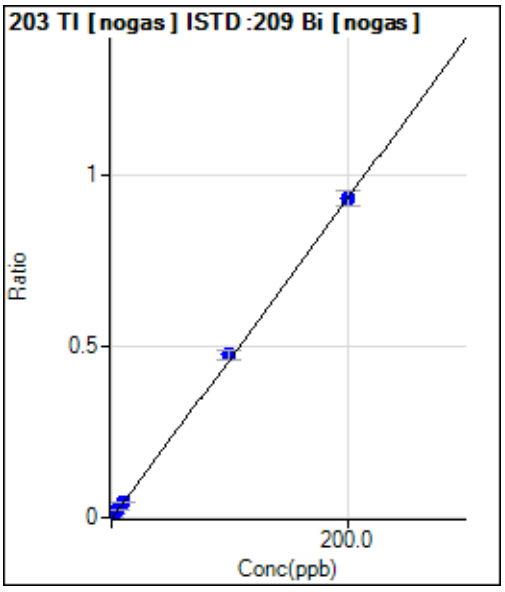
y = 0.0016 * x + 7.0116E-005
R = 1.0000
DL = 0.0521 ppb
BEC = 0.0427 ppb

Weight: <None>
Min Conc: <None>

Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	30.	
2	☐	2.000	2.151	12479.21	0.0101	P	5.5	7.6
3	☐	5.000	5.042	29448.80	0.0236	P	6.0	0.8
4	☐	10.000	9.872	57849.08	0.0462	P	4.0	-1.3
5	☐	100.000	101.796	613713.33	0.4759	P	5.9	1.8
6	☐	200.000	199.106	1224286.47	0.9309	P	5.4	-0.4
7	☐	1.000						

y = 0.0047 * x + 5.1395E-005

R = 0.9999

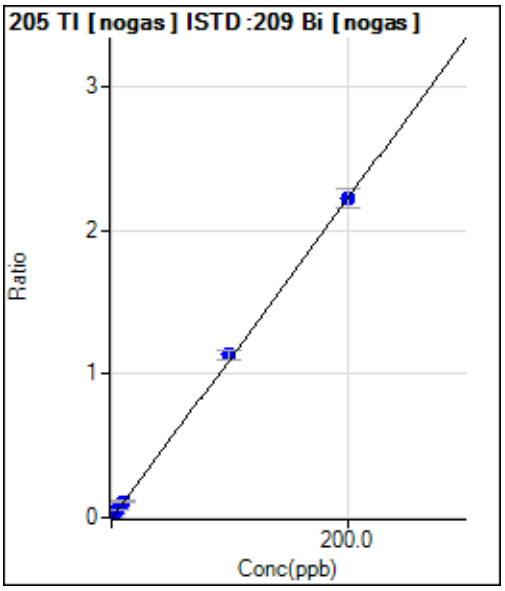
DL = 0.009937 ppb

BEC = 0.01099 ppb

Weight: <None>

Min Conc: <None>

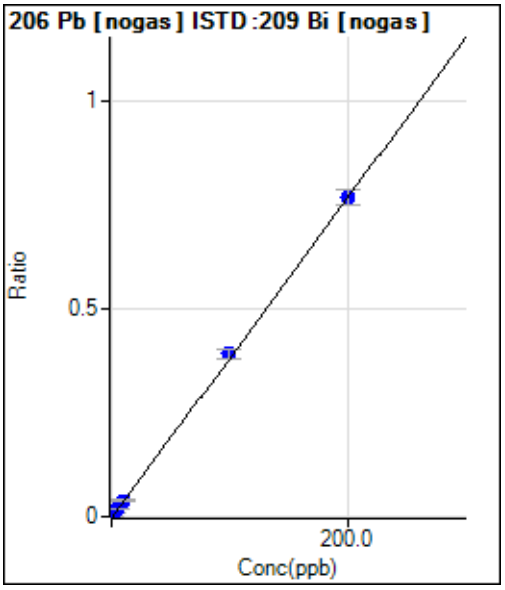
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	110.00	0.0001	P	33.	
2	☐	2.000	2.109	29171.43	0.0236	P	7.8	5.5
3	☐	5.000	5.052	70364.83	0.0565	P	9.5	1.0
4	☐	10.000	10.048	140575.23	0.1123	P	5.6	0.5
5	☐	100.000	101.868	1466986.07	1.1377	P	5.8	1.9
6	☐	200.000	199.061	2923630.79	2.2230	P	6.2	-0.5
7	☐	1.000						

y = 0.0112 * x + 8.9720E-005
R = 0.9999
DL = 0.007953 ppb
BEC = 0.008034 ppb

Weight: <None>
Min Conc: <None>

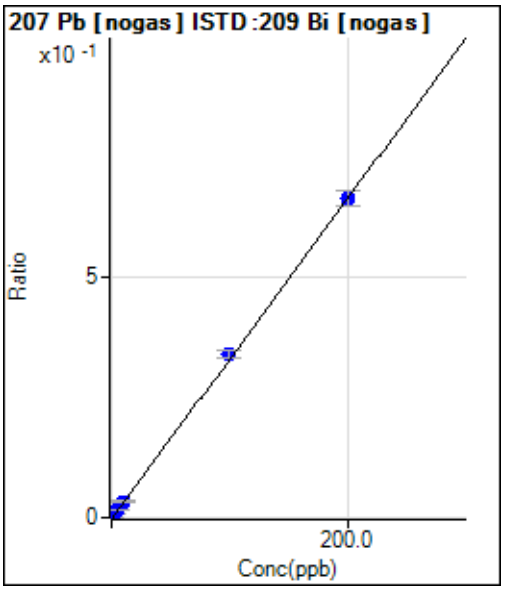


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	330.01	0.0003	P	18.	
2	☐	2.000	2.124	10457.52	0.0085	P	6.8	6.2
3	☐	5.000	4.947	24144.98	0.0194	P	8.0	-1.1
4	☐	10.000	10.086	49105.41	0.0392	P	5.7	0.9
5	☐	100.000	101.549	506174.05	0.3926	P	6.2	1.5
6	☐	200.000	199.221	1012548.82	0.7699	P	5.2	-0.4
7	☐	1.000						

y = 0.0039 * x + 2.7001E-004
R = 1.0000
DL = 0.03913 ppb
BEC = 0.0699 ppb

Weight: <None>
Min Conc: <None>

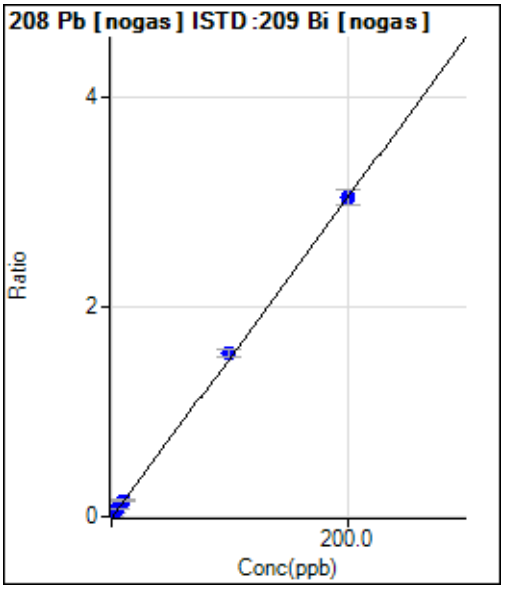
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306.68	0.0003	P	9.3	
2	☐	2.000	2.065	8772.97	0.0071	P	8.7	3.3
3	☐	5.000	5.015	21076.63	0.0169	P	8.1	0.3
4	☐	10.000	9.920	41567.06	0.0332	P	6.0	-0.8
5	☐	100.000	101.989	437334.68	0.3391	P	5.6	2.0
6	☐	200.000	199.008	870081.39	0.6615	P	4.7	-0.5
7	☐	1.000						

y = 0.0033 * x + 2.5104E-004
R = 0.9999
DL = 0.02115 ppb
BEC = 0.07555 ppb

Weight: <None>
Min Conc: <None>

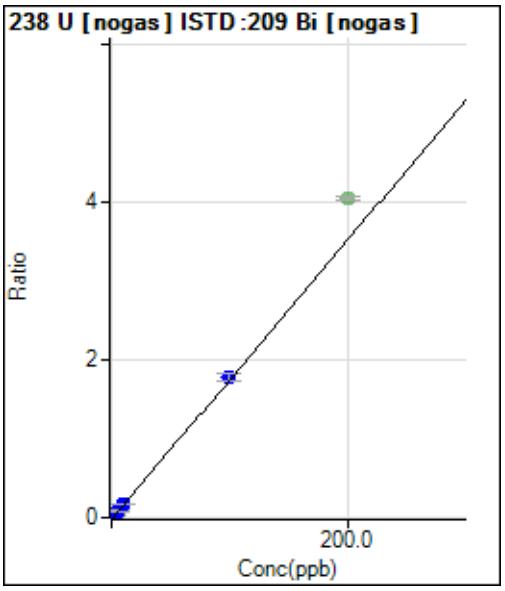


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1413.39	0.0012	P	8.0	
2	☐	2.000	2.115	41408.72	0.0336	P	6.7	5.8
3	☐	5.000	5.022	97287.85	0.0781	P	7.3	0.4
4	☐	10.000	10.026	193642.99	0.1547	P	5.2	0.3
5	☐	100.000	101.824	2012357.76	1.5606	P	5.5	1.8
6	☐	200.000	199.085	4011600.85	3.0501	P	5.1	-0.5
7	☐	1.000						

y = 0.0153 * x + 0.0012
R = 0.9999
DL = 0.01821 ppb
BEC = 0.07546 ppb

Weight: <None>
Min Conc: <None>

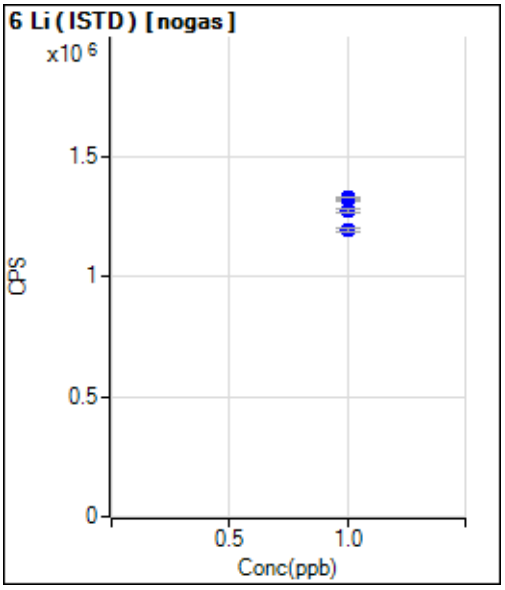
Calibration for 132_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	20.	
2	☐	2.000	2.001	43852.19	0.0355	P	7.2	0.1
3	☐	5.000	4.795	106011.49	0.0851	P	7.1	-4.1
4	☐	10.000	9.696	215174.32	0.1719	P	6.0	-3.0
5	☐	100.000	100.041	2286603.30	1.7733	P	5.8	0.0
6	☑	200.000		5331034.71	4.0522	A	1.2	
7	☐	1.000						

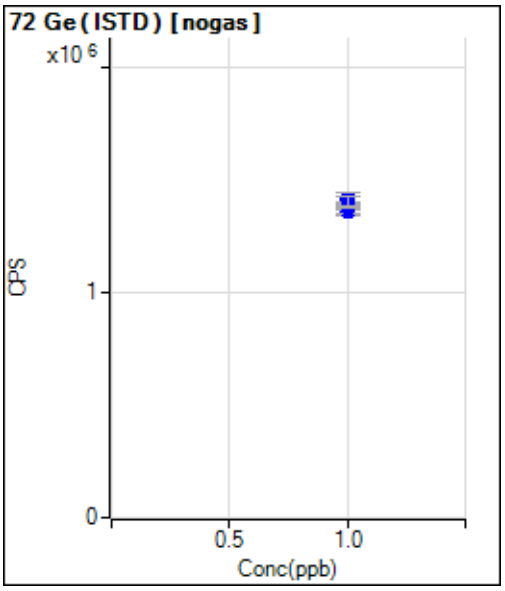
y = 0.0177 * x + 6.8181E-005
R = 1.0000
DL = 0.002309 ppb
BEC = 0.003847 ppb

Weight: <None>
Min Conc: <None>

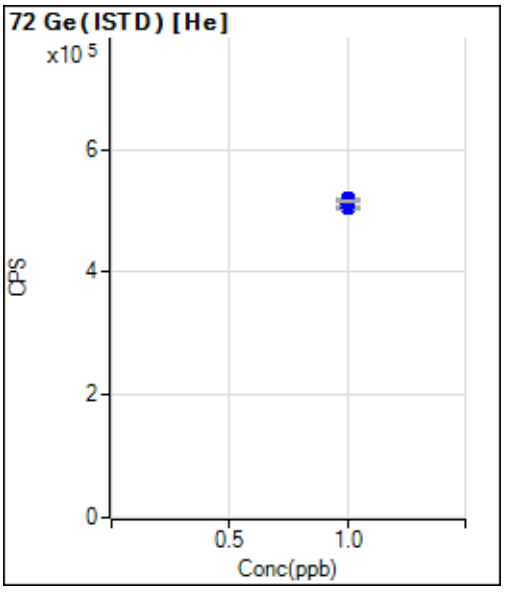


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1328725.24		P	1.0	
2	☐	1.000		1327805.50		P	0.5	
3	☐	1.000		1323334.42		P	0.7	
4	☐	1.000		1332615.13		P	0.4	
5	☐	1.000		1273794.22		P	1.2	
6	☐	1.000		1199394.14		P	1.2	
7	☐	1.000						

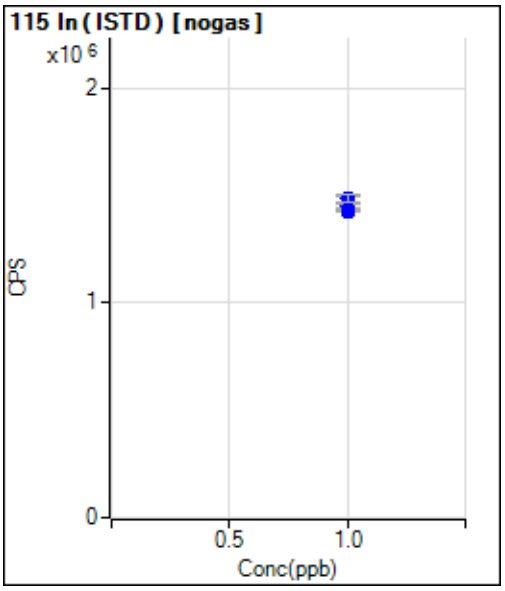
Calibration for 132_ICV.d



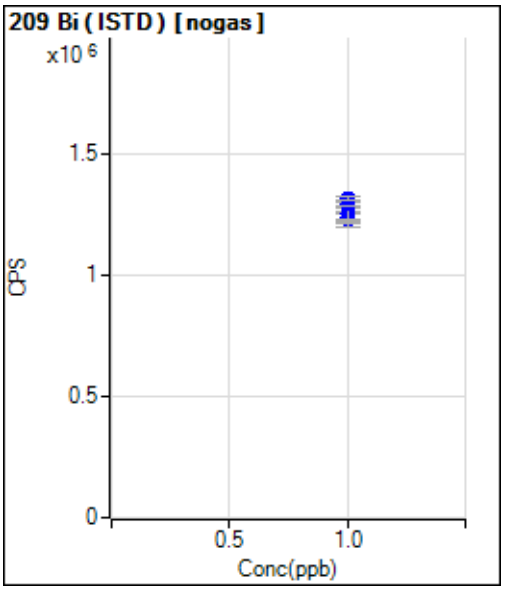
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360669.98		P	1.9	
2	☐	1.000		1359402.22		P	1.6	
3	☐	1.000		1380875.40		P	1.3	
4	☐	1.000		1390666.75		P	2.3	
5	☐	1.000		1420932.38		P	3.3	
6	☐	1.000		1409284.93		P	3.0	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		503650.34		P	0.9	
2	☐	1.000		505288.60		P	1.2	
3	☐	1.000		515253.01		P	0.7	
4	☐	1.000		511483.12		P	0.8	
5	☐	1.000		520660.35		P	0.6	
6	☐	1.000		515578.52		P	0.8	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1428209.93		P	1.0	
2	☐	1.000		1434337.43		P	0.1	
3	☐	1.000		1455792.72		P	1.2	
4	☐	1.000		1464539.59		P	0.8	
5	☐	1.000		1485684.98		P	1.7	
6	☐	1.000		1487726.19		P	2.2	
7	☐	1.000						



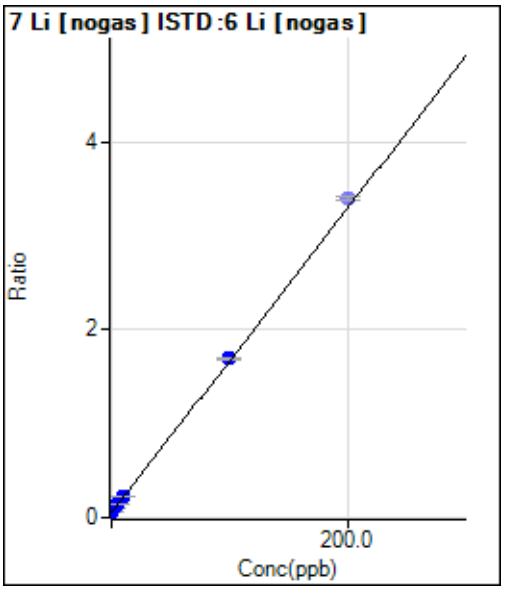
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1225173.55		P	4.8	
2	☐	1.000		1236494.02		P	4.4	
3	☐	1.000		1249031.20		P	4.8	
4	☐	1.000		1253252.95		P	3.5	
5	☐	1.000		1289996.13		P	1.1	
6	☐	1.000		1315704.56		P	1.1	
7	☐	1.000						

Calibration for 021_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 9:58:20 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	014CALB.d	CAL BLK	8/4/2023 10:35:41 AM
2	015CALS.d	2/10/200	8/4/2023 10:37:46 AM
3	016CALS.d	5/25/500	8/4/2023 10:39:48 AM
4	017CALS.d	10/50/1000	8/4/2023 10:41:50 AM
5	018CALS.d	100/500/10K	8/4/2023 10:43:53 AM
6	019CALS.d	200/1000/20K	8/4/2023 10:45:56 AM
7			

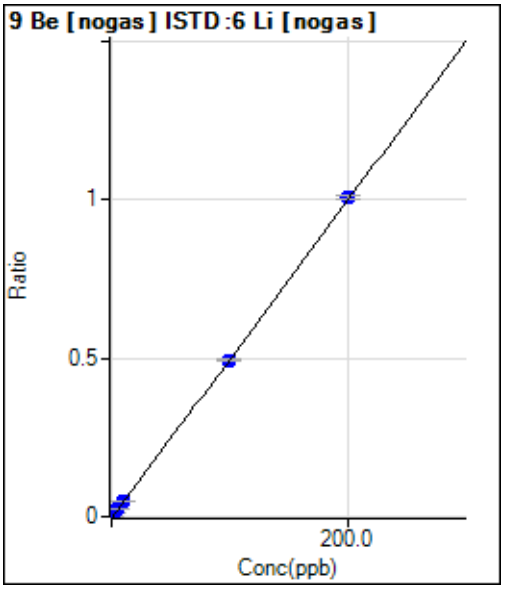
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73741.41	0.0701	P	1.1	
2	☐	2.000	1.939	107470.37	0.1016	P	0.7	-3.1
3	☐	5.000	4.750	155423.75	0.1472	P	0.2	-5.0
4	☐	10.000	9.517	237394.05	0.2247	P	0.8	-4.8
5	☐	100.000	100.062	1744731.90	1.6954	P	0.7	0.1
6	☑	200.000		3341690.47	3.4050	P	1.0	
7	☐	1.000						

y = 0.0162 * x + 0.0701
R = 1.0000
DL = 0.1459 ppb
BEC = 4.315 ppb

Weight: <None>
Min Conc: <None>

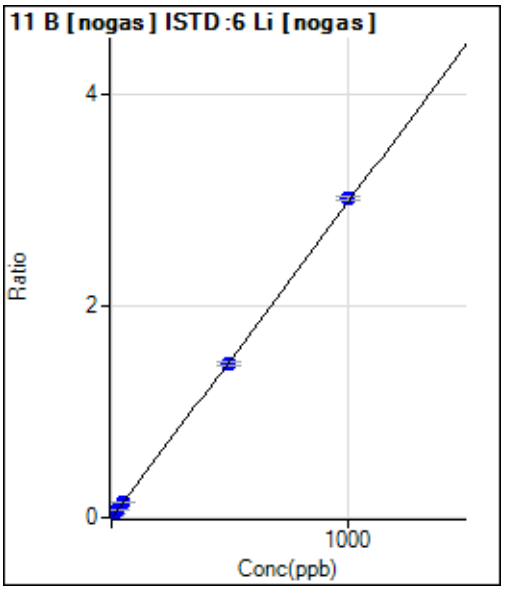


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28.33	0.0000	P	27.	
2	☐	2.000	1.888	10054.97	0.0095	P	1.9	-5.6
3	☐	5.000	4.585	24329.09	0.0230	P	2.1	-8.3
4	☐	10.000	9.322	49479.91	0.0468	P	1.1	-6.8
5	☐	100.000	98.362	508294.97	0.4939	P	0.6	-1.6
6	☐	200.000	200.864	989806.83	1.0086	P	1.1	0.4
7	☐	1.000						

y = 0.0050 * x + 2.6974E-005
R = 1.0000
DL = 0.004469 ppb
BEC = 0.005372 ppb

Weight: <None>
Min Conc: <None>

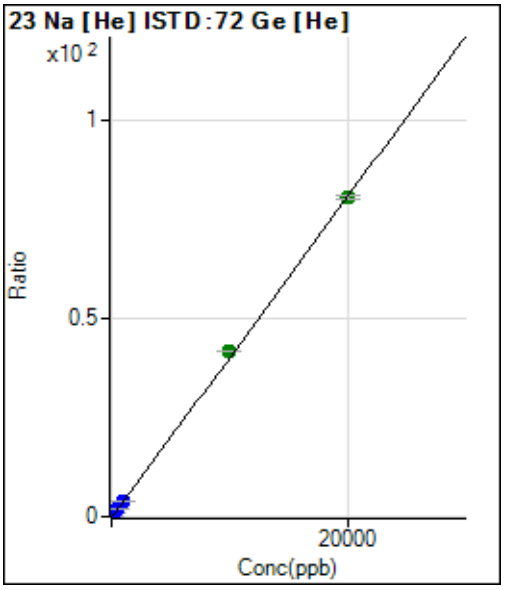
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9869.88	0.0094	P	2.6	
2	☐	10.000	9.387	39585.45	0.0374	P	1.4	-6.1
3	☐	25.000	22.643	81280.95	0.0770	P	0.8	-9.4
4	☐	50.000	46.121	155470.22	0.1471	P	1.6	-7.8
5	☐	500.000	483.056	1494729.82	1.4521	P	1.9	-3.4
6	☐	1000.000	1008.731	2965923.39	3.0221	P	1.4	0.9
7	☐	5.000						

y = 0.0030 * x + 0.0094
R = 0.9998
DL = 0.244 ppb
BEC = 3.141 ppb

Weight: <None>
Min Conc: <None>

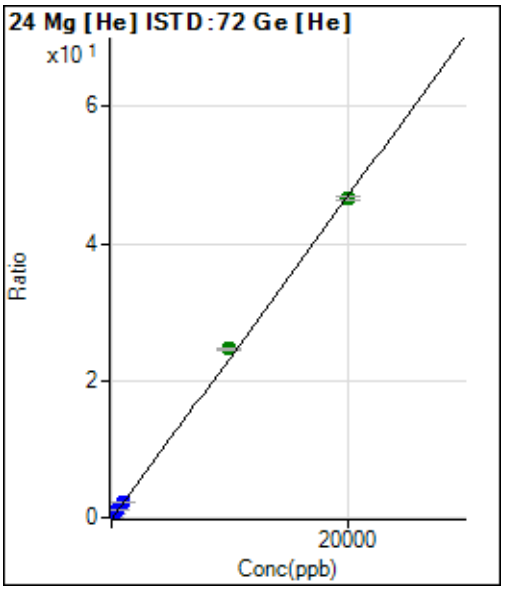


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	39006.26	0.0921	P	0.4	
2	☐	200.000	209.093	402158.80	0.9409	P	0.7	4.5
3	☐	500.000	485.580	892108.61	2.0633	P	0.8	-2.9
4	☐	1000.000	966.935	1760617.63	4.0174	P	0.6	-3.3
5	☐	10000.00	10305.99	18645024.30	41.9300	A	0.4	3.1
6	☐	20000.00	19848.92	36389145.29	80.6702	A	0.8	-0.8
7	☐	100.000						

y = 0.0041 * x + 0.0921
R = 0.9998
DL = 0.2761 ppb
BEC = 22.68 ppb

Weight: <None>
Min Conc: <None>

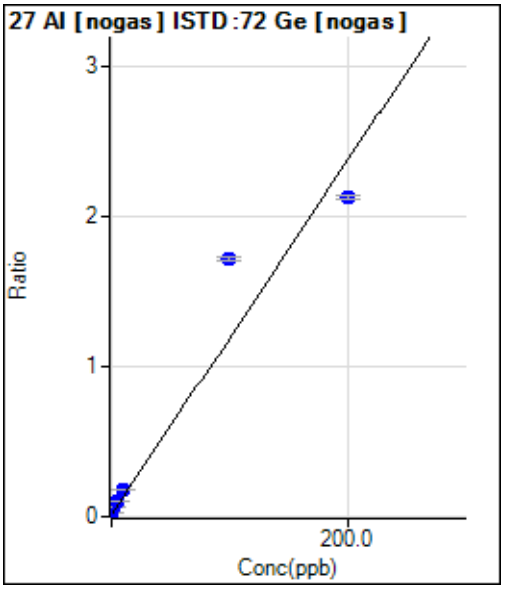
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	580.02	0.0014	P	4.2	
2	☐	200.000	206.965	209112.31	0.4892	P	0.5	3.5
3	☐	500.000	485.774	495706.31	1.1465	P	1.1	-2.8
4	☐	1000.000	966.902	999495.22	2.2806	P	0.5	-3.3
5	☐	10000.00	10459.63	10963916.09	24.6573	A	1.3	4.6
6	☐	20000.00	19772.12	21024539.27	46.6092	A	0.7	-1.1
7	☐	100.000						

y = 0.0024 * x + 0.0014
R = 0.9996
DL = 0.0731 ppb
BEC = 0.581 ppb

Weight: <None>
Min Conc: <None>

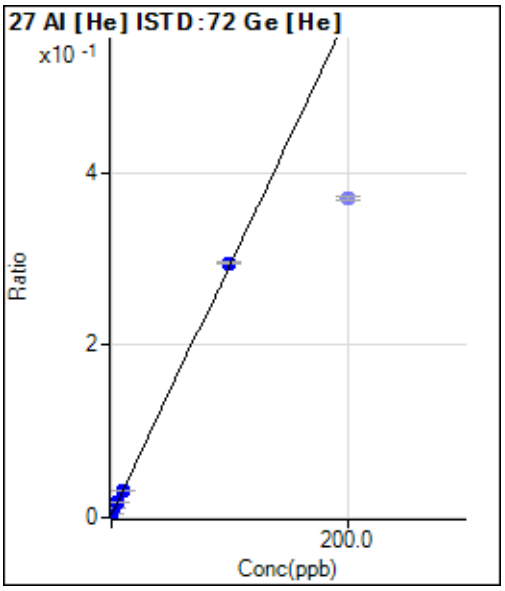


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25922.16	0.0234	P	4.6	
2	☐	2.000	3.364	70414.34	0.0632	P	1.0	68.2
3	☐	5.000	6.883	116864.18	0.1048	P	0.3	37.7
4	☐	10.000	13.185	202659.95	0.1794	P	0.3	31.9
5	☐	100.000	143.450	2011486.33	1.7211	P	2.0	43.5
6	☐	200.000	178.055	2539469.96	2.1306	P	0.8	-11.0
7	☐	1.000						

y = 0.0118 * x + 0.0234
R = 0.9659
DL = 0.2706 ppb
BEC = 1.976 ppb

Weight: <None>
Min Conc: <None>

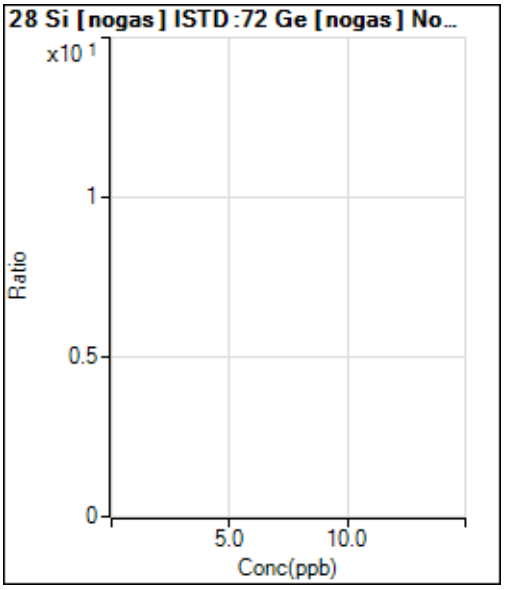
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1733.47	0.0041	P	3.9	
2	☐	2.000	2.553	4914.22	0.0115	P	4.6	27.6
3	☐	5.000	4.795	7785.48	0.0180	P	2.7	-4.1
4	☐	10.000	9.137	13412.71	0.0306	P	1.8	-8.6
5	☐	100.000	100.085	130973.74	0.2945	P	0.9	0.1
6	☑	200.000		166964.58	0.3701	P	1.1	
7	☐	1.000						

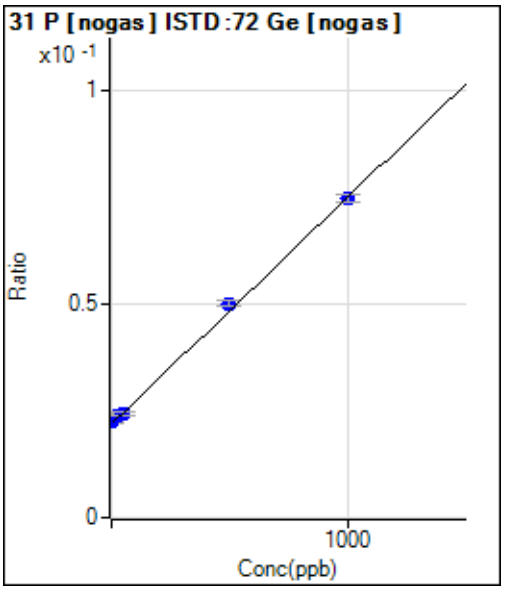
y = 0.0029 * x + 0.0041
R = 0.9999
DL = 0.1638 ppb
BEC = 1.409 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

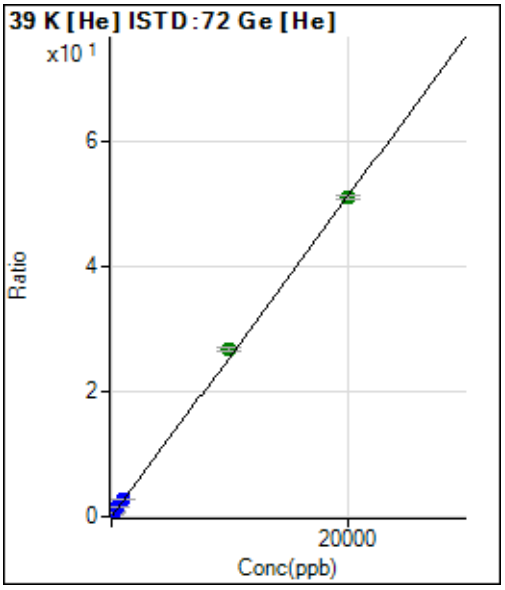
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	24790.33	0.0224	P	1.8	
2	☐	10.000	21.363	26169.51	0.0235	P	4.1	113.
3	☐	25.000	32.685	26857.19	0.0241	P	2.0	30.7
4	☐	50.000	37.885	27528.35	0.0244	P	2.4	-24.2
5	☐	500.000	523.909	58645.29	0.0502	P	2.3	4.8
6	☐	1000.000	988.345	89194.98	0.0749	P	1.9	-1.2
7	☐	5.000						

y = 5.3113E-005 * x + 0.0224
R = 0.9994
DL = 23.16 ppb
BEC = 421 ppb

Weight: <None>
Min Conc: <None>

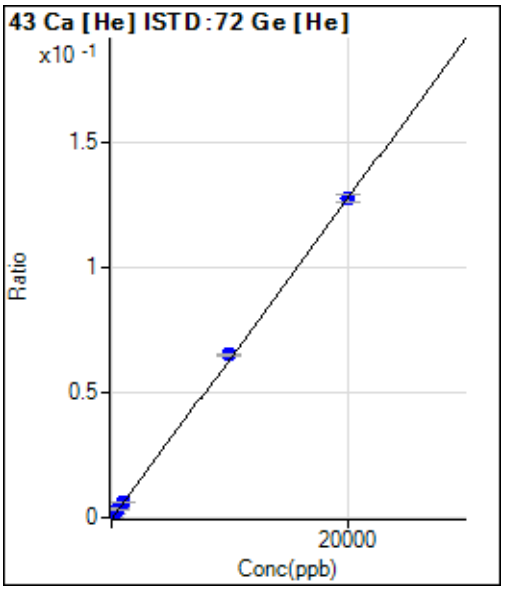


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	109758.80	0.2591	P	2.0	
2	☐	200.000	198.379	328057.89	0.7675	P	0.7	-0.8
3	☐	500.000	463.898	626047.60	1.4480	P	1.6	-7.2
4	☐	1000.000	922.371	1149513.58	2.6229	P	0.1	-7.8
5	☐	10000.00	10330.20	11886882.74	26.7326	A	1.8	3.3
6	☐	20000.00	19839.69	23050932.16	51.1027	A	1.7	-0.8
7	☐	100.000						

y = 0.0026 * x + 0.2591
R = 0.9998
DL = 5.955 ppb
BEC = 101.1 ppb

Weight: <None>
Min Conc: <None>

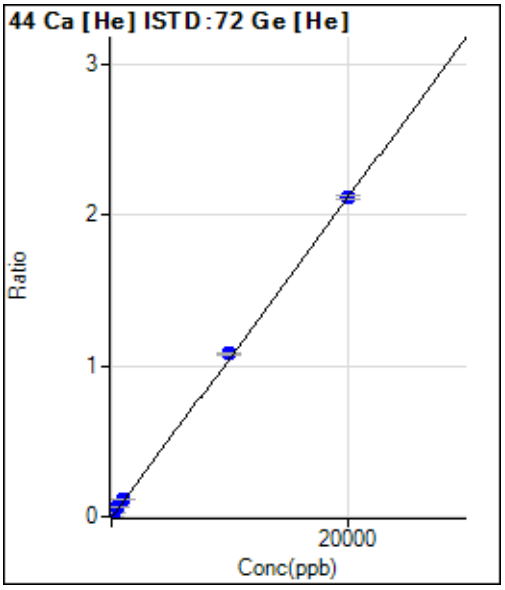
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	62.	
2	☐	200.000	202.785	590.02	0.0014	P	16.	1.4
3	☐	500.000	517.831	1470.10	0.0034	P	10.	3.6
4	☐	1000.000	968.222	2756.96	0.0063	P	2.3	-3.2
5	☐	10000.00	10178.31	29071.43	0.0654	P	1.2	1.8
6	☐	20000.00	19911.95	57659.63	0.1278	P	2.0	-0.4
7	☐	100.000						

y = 6.4157E-006 * x + 7.8975E-005
R = 0.9999
DL = 23.06 ppb
BEC = 12.31 ppb

Weight: <None>
Min Conc: <None>

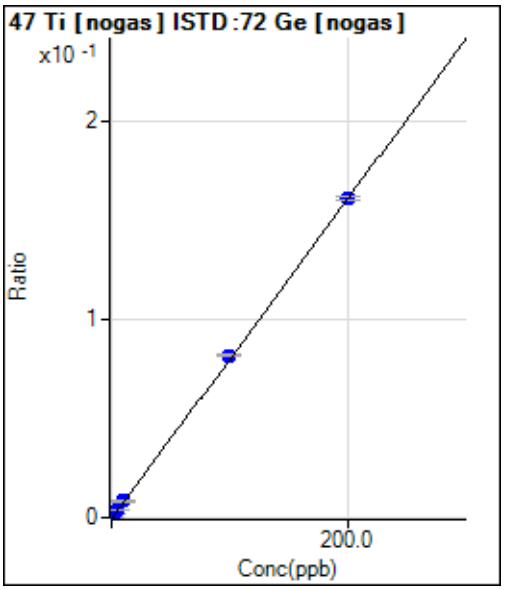


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1486.77	0.0035	P	10.	
2	☐	200.000	208.806	10977.49	0.0257	P	0.9	4.4
3	☐	500.000	513.922	25114.47	0.0581	P	0.8	2.8
4	☐	1000.000	1016.083	48825.43	0.1114	P	1.6	1.6
5	☐	10000.00	10140.49	480400.59	1.0804	P	0.4	1.4
6	☐	20000.00	19928.51	956159.59	2.1198	P	0.9	-0.4
7	☐	100.000						

y = 1.0619E-004 * x + 0.0035
R = 1.0000
DL = 10.63 ppb
BEC = 33.04 ppb

Weight: <None>
Min Conc: <None>

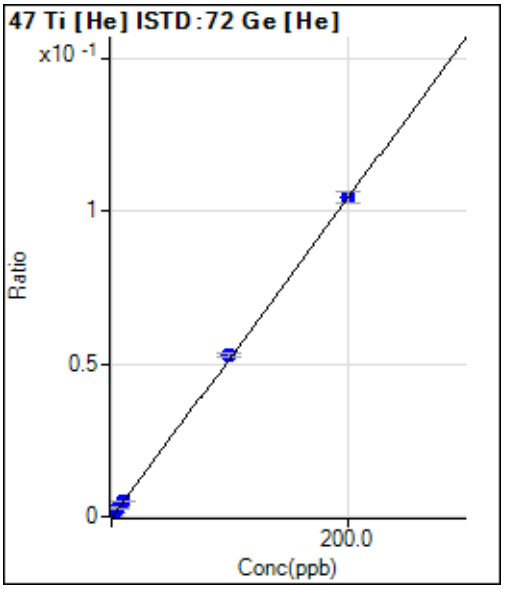
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	19.	
2	☐	2.000	2.036	1963.50	0.0018	P	4.0	1.8
3	☐	5.000	5.016	4650.80	0.0042	P	3.5	0.3
4	☐	10.000	10.133	9379.75	0.0083	P	7.0	1.3
5	☐	100.000	101.296	95898.66	0.0821	P	1.2	1.3
6	☐	200.000	199.345	192295.87	0.1614	P	1.6	-0.3
7	☐	1.000						

y = 8.0892E-004 * x + 1.1421E-004
R = 1.0000
DL = 0.08289 ppb
BEC = 0.1412 ppb

Weight: <None>
Min Conc: <None>

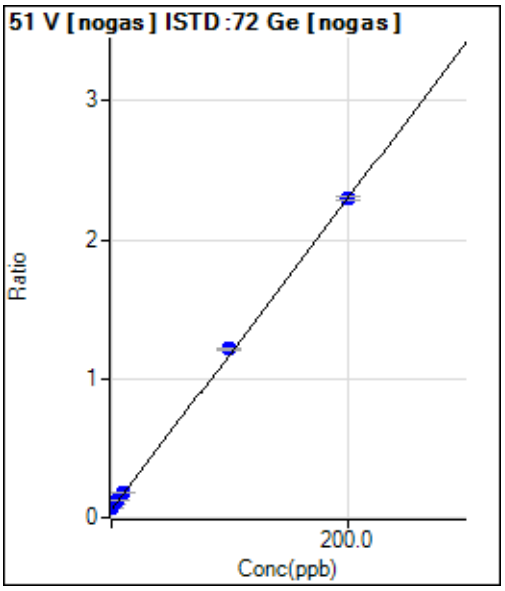


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	45.	
2	☐	2.000	2.277	523.35	0.0012	P	11.	13.8
3	☐	5.000	5.120	1173.40	0.0027	P	17.	2.4
4	☐	10.000	9.704	2243.54	0.0051	P	5.1	-3.0
5	☐	100.000	101.058	23572.01	0.0530	P	2.5	1.1
6	☐	200.000	199.480	47173.49	0.1046	P	3.7	-0.3
7	☐	1.000						

y = 5.2416E-004 * x + 3.1659E-005
R = 1.0000
DL = 0.08243 ppb
BEC = 0.0604 ppb

Weight: <None>
Min Conc: <None>

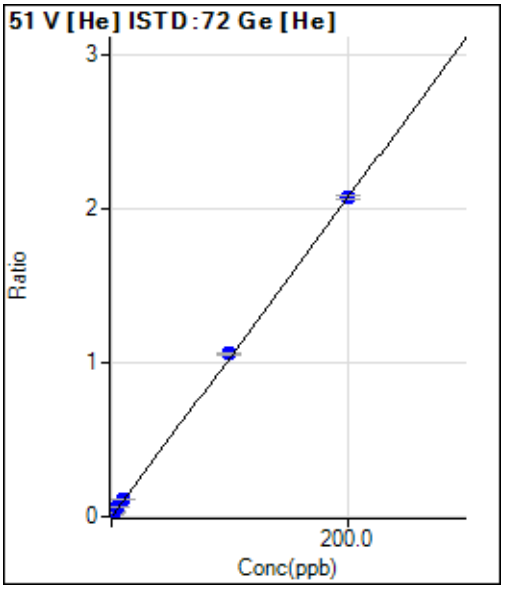
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78972.34	0.0713	P	1.8	
2	☐	2.000	2.197	106781.37	0.0958	P	0.7	9.9
3	☐	5.000	5.176	144003.23	0.1292	P	1.3	3.5
4	☐	10.000	10.125	208422.28	0.1846	P	1.6	1.3
5	☐	100.000	101.977	1417001.33	1.2124	P	1.9	2.0
6	☐	200.000	198.999	2739078.40	2.2981	P	0.9	-0.5
7	☐	1.000						

y = 0.0112 * x + 0.0713
R = 0.9999
DL = 0.3381 ppb
BEC = 6.368 ppb

Weight: <None>
Min Conc: <None>

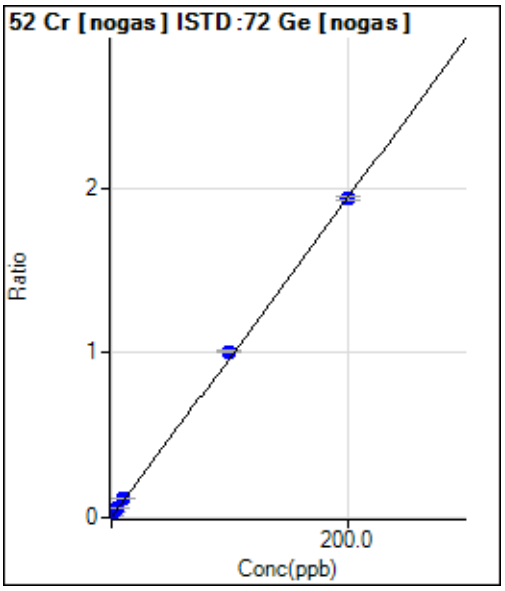


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3618.24	0.0085	P	5.9	
2	☐	2.000	2.174	13295.87	0.0311	P	1.1	8.7
3	☐	5.000	5.032	26270.58	0.0608	P	2.7	0.6
4	☐	10.000	10.012	49275.33	0.1124	P	0.5	0.1
5	☐	100.000	101.444	471885.57	1.0612	P	1.0	1.4
6	☐	200.000	199.275	936612.53	2.0764	P	1.1	-0.4
7	☐	1.000						

y = 0.0104 * x + 0.0085
R = 1.0000
DL = 0.1456 ppb
BEC = 0.8234 ppb

Weight: <None>
Min Conc: <None>

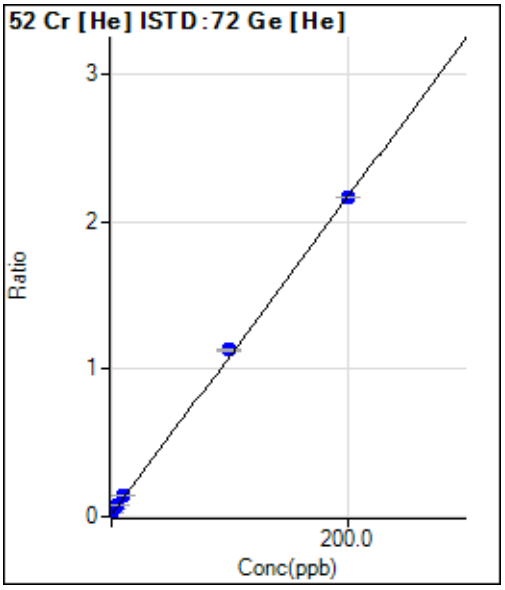
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13573.01	0.0122	P	2.9	
2	☐	2.000	2.116	36531.19	0.0328	P	1.4	5.8
3	☐	5.000	5.138	69268.40	0.0621	P	0.6	2.8
4	☐	10.000	10.489	128861.83	0.1141	P	1.1	4.9
5	☐	100.000	102.655	1179255.50	1.0090	P	1.6	2.7
6	☐	200.000	198.643	2313586.58	1.9410	P	0.6	-0.7
7	☐	1.000						

y = 0.0097 * x + 0.0122
R = 0.9999
DL = 0.1093 ppb
BEC = 1.262 ppb

Weight: <None>
Min Conc: <None>

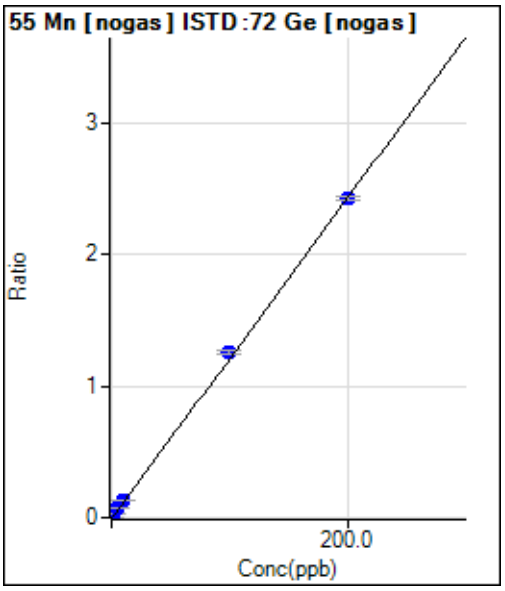


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11160.99	0.0264	P	9.3	
2	☐	2.000	2.213	21468.94	0.0502	P	1.2	10.7
3	☐	5.000	5.200	35635.62	0.0824	P	3.5	4.0
4	☐	10.000	10.445	60899.46	0.1390	P	0.4	4.5
5	☐	100.000	102.463	502763.47	1.1307	P	1.8	2.5
6	☐	200.000	198.739	978118.79	2.1684	P	0.6	-0.6
7	☐	1.000						

y = 0.0108 * x + 0.0264
R = 0.9999
DL = 0.6864 ppb
BEC = 2.447 ppb

Weight: <None>
Min Conc: <None>

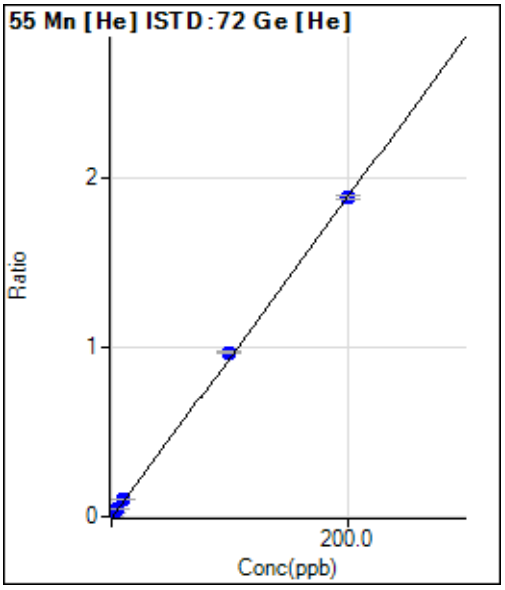
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3070.37	0.0028	P	12.	
2	☐	2.000	2.177	32662.33	0.0293	P	3.1	8.8
3	☐	5.000	5.264	74624.08	0.0669	P	1.0	5.3
4	☐	10.000	10.438	146849.66	0.1300	P	0.7	4.4
5	☐	100.000	102.791	1467711.80	1.2558	P	1.4	2.8
6	☐	200.000	198.574	2888432.04	2.4235	P	1.2	-0.7
7	☐	1.000						

y = 0.0122 * x + 0.0028
R = 0.9999
DL = 0.08458 ppb
BEC = 0.2275 ppb

Weight: <None>
Min Conc: <None>

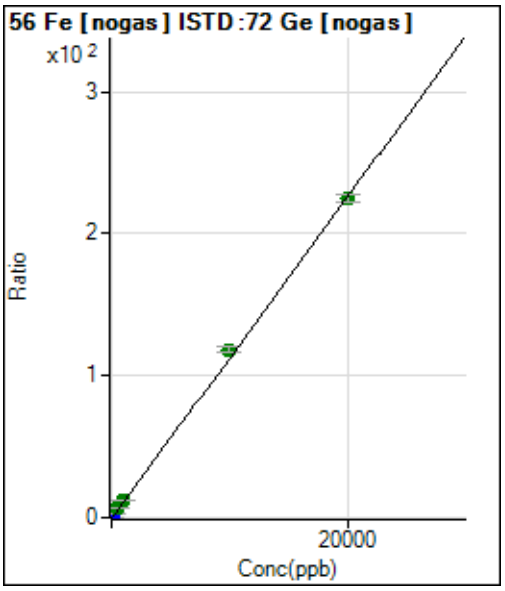


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	450.02	0.0011	P	16.	
2	☐	2.000	2.209	9403.09	0.0220	P	4.9	10.4
3	☐	5.000	5.061	21201.76	0.0490	P	2.0	1.2
4	☐	10.000	10.288	43205.32	0.0986	P	1.8	2.9
5	☐	100.000	102.311	431736.67	0.9710	P	1.1	2.3
6	☐	200.000	198.827	850664.52	1.8859	P	1.1	-0.6
7	☐	1.000						

y = 0.0095 * x + 0.0011
R = 0.9999
DL = 0.05644 ppb
BEC = 0.1121 ppb

Weight: <None>
Min Conc: <None>

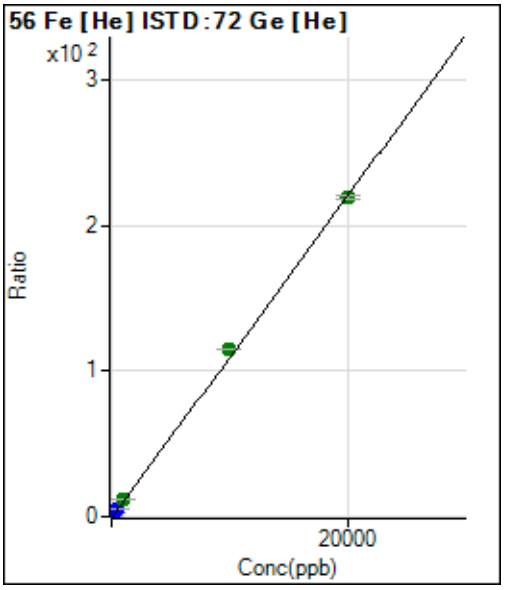
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	386700.38	0.3489	P	0.7	
2	☐	200.000	199.504	2910056.00	2.6121	P	0.8	-0.2
3	☐	500.000	551.432	7361525.72	6.6044	A	0.8	10.3
4	☐	1000.000	1087.830	14329703.54	12.6893	A	1.8	8.8
5	☐	10000.00	10409.75	138355031.2	118.438	A	3.0	4.1
6	☐	20000.00	19789.44	267863742.6	224.841	A	2.7	-1.1
7	☐	100.000						

y = 0.0113 * x + 0.3489
R = 0.9997
DL = 0.608 ppb
BEC = 30.76 ppb

Weight: <None>
Min Conc: <None>

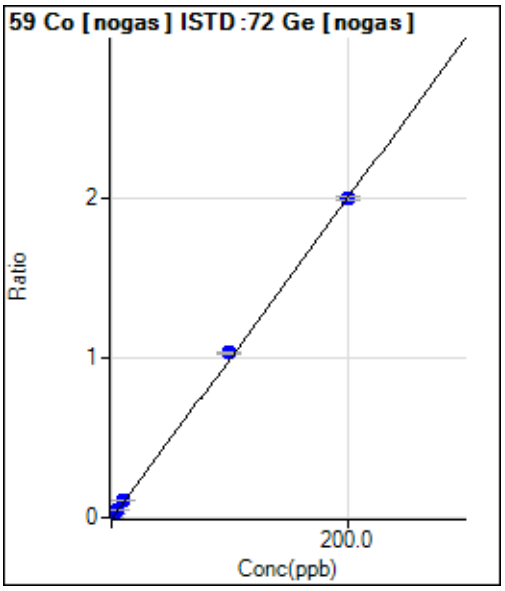


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14387.40	0.0339	P	4.3	
2	☐	200.000	202.105	973273.58	2.2771	P	1.1	1.1
3	☐	500.000	470.666	2273331.63	5.2578	P	0.1	-5.9
4	☐	1000.000	1096.116	5346251.59	12.1995	A	1.3	9.6
5	☐	10000.00	10385.13	51270620.90	115.296	A	0.4	3.9
6	☐	20000.00	19803.34	99159648.52	219.826	A	0.8	-1.0
7	☐	100.000						

y = 0.0111 * x + 0.0339
R = 0.9997
DL = 0.3956 ppb
BEC = 3.058 ppb

Weight: <None>
Min Conc: <None>

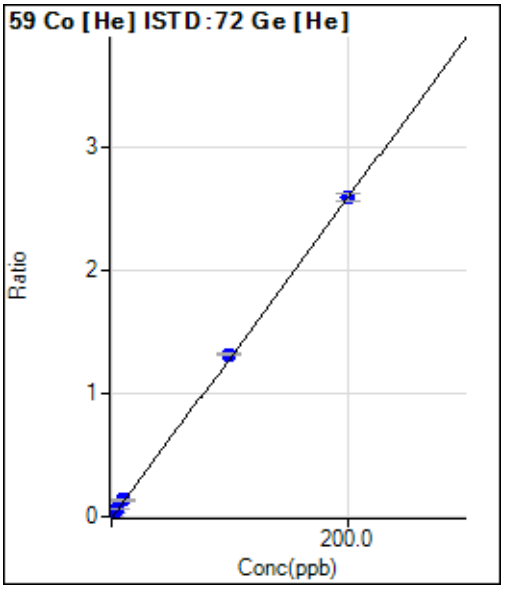
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	93.33	0.0001	P	25.	
2	☐	2.000	2.227	25047.77	0.0225	P	1.4	11.4
3	☐	5.000	5.255	58998.93	0.0529	P	1.8	5.1
4	☐	10.000	10.439	118672.09	0.1051	P	2.2	4.4
5	☐	100.000	102.441	1204303.65	1.0303	P	1.1	2.4
6	☐	200.000	198.749	2382329.91	1.9988	P	1.1	-0.6
7	☐	1.000						

y = 0.0101 * x + 8.4283E-005
R = 0.9999
DL = 0.00636 ppb
BEC = 0.008381 ppb

Weight: <None>
Min Conc: <None>

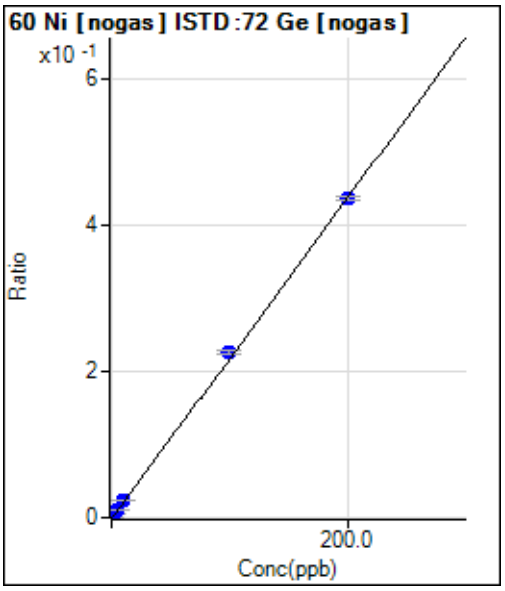


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	35.	
2	☐	2.000	2.186	12161.80	0.0285	P	3.7	9.3
3	☐	5.000	5.226	29369.04	0.0679	P	1.3	4.5
4	☐	10.000	10.272	58470.38	0.1334	P	1.8	2.7
5	☐	100.000	101.240	584500.66	1.3144	P	0.7	1.2
6	☐	200.000	199.359	1167430.48	2.5882	P	1.9	-0.3
7	☐	1.000						

y = 0.0130 * x + 7.1075E-005
R = 1.0000
DL = 0.005753 ppb
BEC = 0.005475 ppb

Weight: <None>
Min Conc: <None>

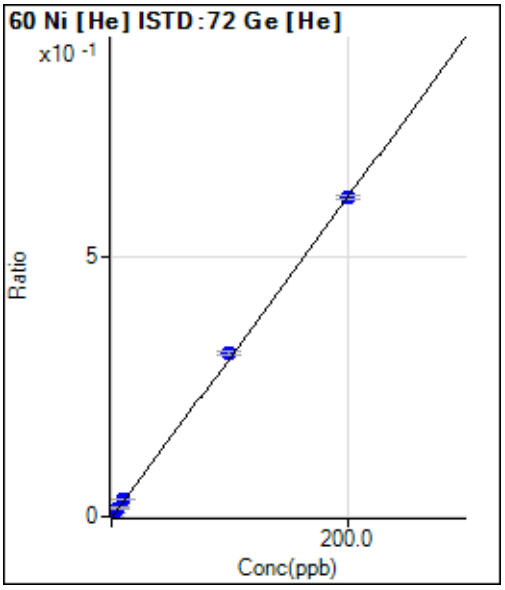
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	370.01	0.0003	P	18.	
2	☐	2.000	2.370	6181.37	0.0055	P	0.6	18.5
3	☐	5.000	4.966	12555.44	0.0113	P	3.8	-0.7
4	☐	10.000	10.776	27164.95	0.0240	P	2.8	7.8
5	☐	100.000	102.877	264931.41	0.2267	P	1.8	2.9
6	☐	200.000	198.520	521021.11	0.4371	P	0.9	-0.7
7	☐	1.000						

y = 0.0022 * x + 3.3440E-004
R = 0.9999
DL = 0.08619 ppb
BEC = 0.152 ppb

Weight: <None>
Min Conc: <None>

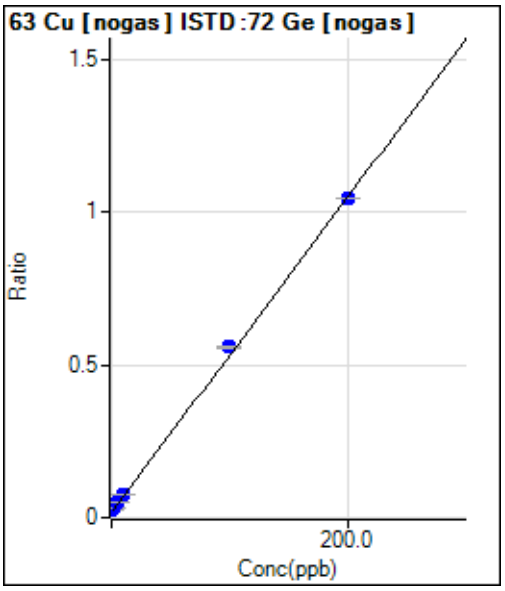


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96.67	0.0002	P	51.	
2	☐	2.000	2.379	3247.08	0.0076	P	2.8	19.0
3	☐	5.000	5.268	7155.19	0.0165	P	3.2	5.4
4	☐	10.000	10.534	14400.39	0.0329	P	2.7	5.3
5	☐	100.000	102.183	140857.90	0.3168	P	2.0	2.2
6	☐	200.000	198.871	278009.68	0.6163	P	1.0	-0.6
7	☐	1.000						

y = 0.0031 * x + 2.2714E-004
R = 0.9999
DL = 0.1126 ppb
BEC = 0.07332 ppb

Weight: <None>
Min Conc: <None>

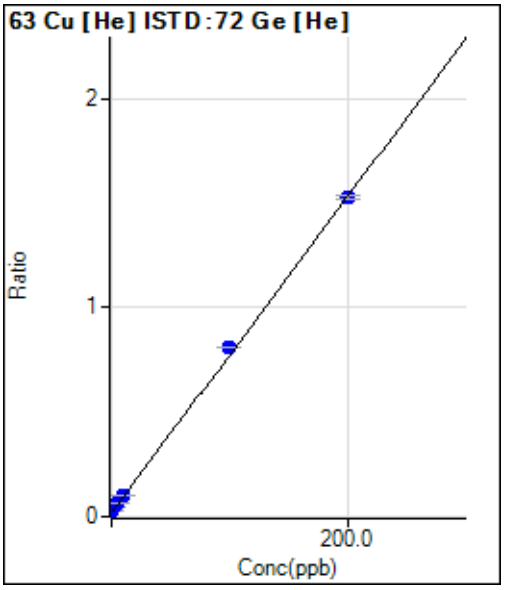
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	24630.55	0.0222	P	0.9	
2	☐	2.000	2.112	36929.11	0.0331	P	1.6	5.6
3	☐	5.000	4.982	53485.28	0.0480	P	0.9	-0.4
4	☐	10.000	10.096	84051.06	0.0744	P	1.2	1.0
5	☐	100.000	103.727	653014.90	0.5585	P	1.6	3.7
6	☐	200.000	198.131	1247733.94	1.0466	P	0.5	-0.9
7	☐	1.000						

y = 0.0052 * x + 0.0222
R = 0.9998
DL = 0.1165 ppb
BEC = 4.298 ppb

Weight: <None>
Min Conc: <None>

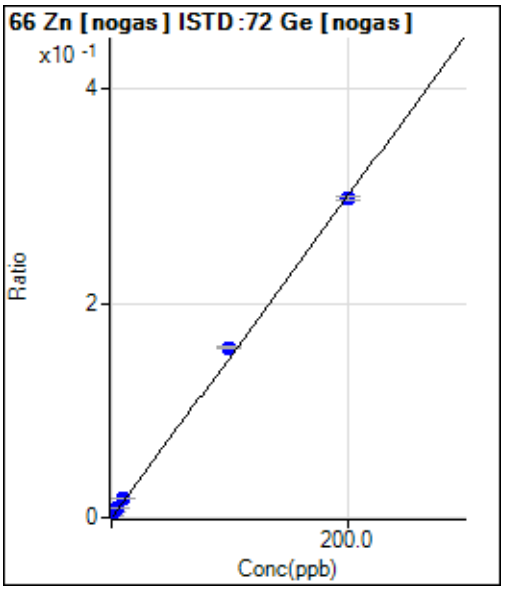


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11431.20	0.0270	P	1.8	
2	☐	2.000	2.268	18872.18	0.0442	P	4.1	13.4
3	☐	5.000	4.963	27919.53	0.0646	P	1.2	-0.7
4	☐	10.000	9.853	44532.91	0.1016	P	0.8	-1.5
5	☐	100.000	103.226	359687.52	0.8089	P	0.6	3.2
6	☐	200.000	198.393	690033.95	1.5298	P	1.4	-0.8
7	☐	1.000						

y = 0.0076 * x + 0.0270
R = 0.9998
DL = 0.1939 ppb
BEC = 3.562 ppb

Weight: <None>
Min Conc: <None>

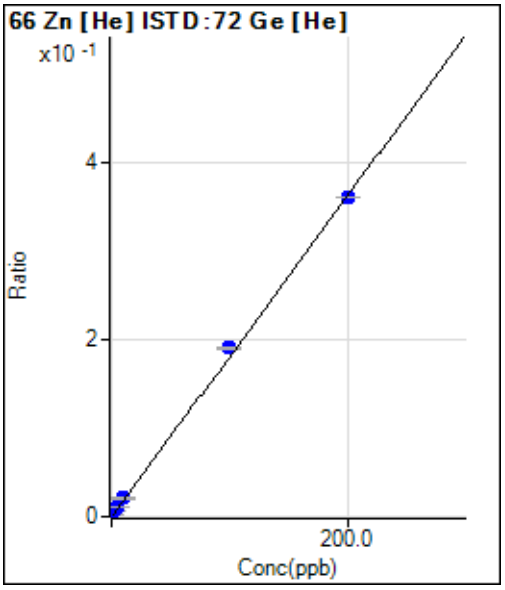
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1273.41	0.0012	P	12.	
2	☐	2.000	2.690	5787.87	0.0052	P	5.2	34.5
3	☐	5.000	5.461	10440.47	0.0094	P	4.4	9.2
4	☐	10.000	10.736	19536.32	0.0173	P	1.2	7.4
5	☐	100.000	104.770	185592.69	0.1587	P	0.5	4.8
6	☐	200.000	197.560	355713.59	0.2983	P	1.4	-1.2
7	☐	1.000						

y = 0.0015 * x + 0.0012
R = 0.9996
DL = 0.2809 ppb
BEC = 0.7648 ppb

Weight: <None>
Min Conc: <None>

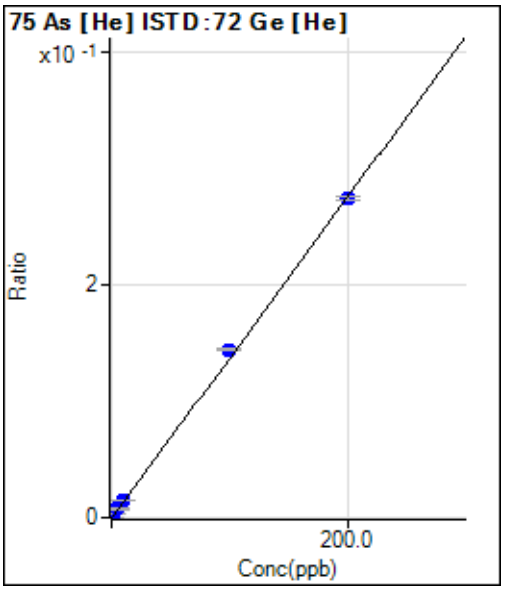


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	633.36	0.0015	P	16.	
2	☐	2.000	2.659	2700.29	0.0063	P	8.7	33.0
3	☐	5.000	5.344	4834.20	0.0112	P	4.2	6.9
4	☐	10.000	10.666	9126.27	0.0208	P	6.4	6.7
5	☐	100.000	104.208	84638.58	0.1903	P	1.0	4.2
6	☐	200.000	197.847	162399.48	0.3600	P	0.6	-1.1
7	☐	1.000						

y = 0.0018 * x + 0.0015
R = 0.9997
DL = 0.4176 ppb
BEC = 0.8259 ppb

Weight: <None>
Min Conc: <None>

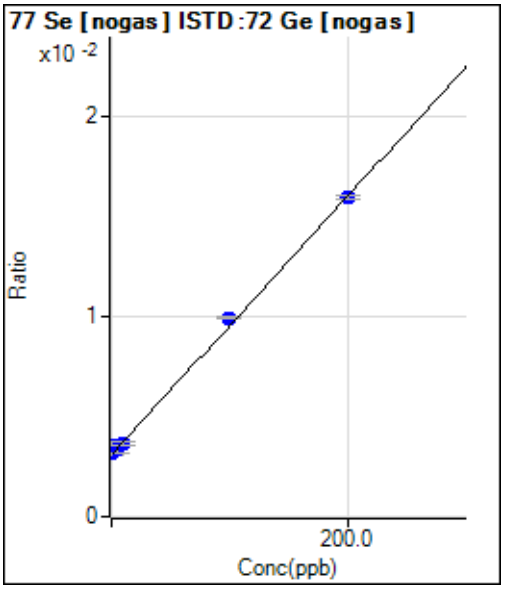
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	264.45	0.0006	P	10.	
2	☐	2.000	1.973	1430.08	0.0033	P	0.6	-1.4
3	☐	5.000	4.998	3251.48	0.0075	P	2.6	0.0
4	☐	10.000	9.890	6253.57	0.0143	P	3.1	-1.1
5	☐	100.000	103.867	64005.64	0.1439	P	1.1	3.9
6	☐	200.000	198.072	123562.35	0.2739	P	1.2	-1.0
7	☐	1.000						

y = 0.0014 * x + 6.2393E-004
R = 0.9997
DL = 0.148 ppb
BEC = 0.4522 ppb

Weight: <None>
Min Conc: <None>

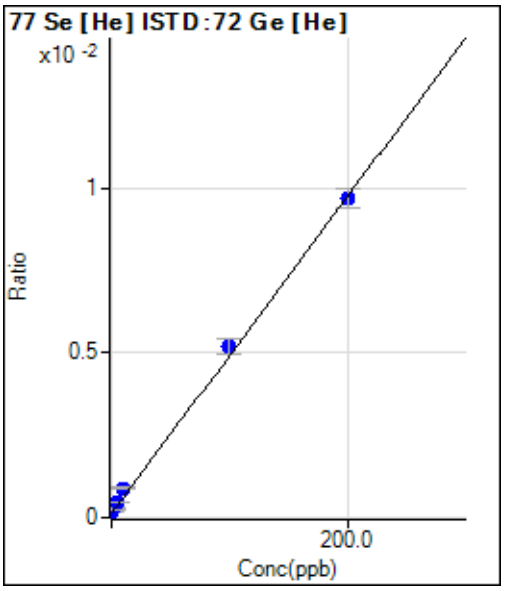


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3533.82	0.0032	P	5.5	
2	☐	2.000	5.861	3977.27	0.0036	P	5.1	193.
3	☐	5.000	2.363	3727.19	0.0033	P	10.	-52.7
4	☐	10.000	7.233	4130.64	0.0037	P	3.2	-27.7
5	☐	100.000	104.581	11624.75	0.0099	P	1.1	4.6
6	☐	200.000	197.875	19035.77	0.0160	P	1.5	-1.1
7	☐	1.000						

y = 6.4570E-005 * x + 0.0032
R = 0.9992
DL = 8.17 ppb
BEC = 49.39 ppb

Weight: <None>
Min Conc: <None>

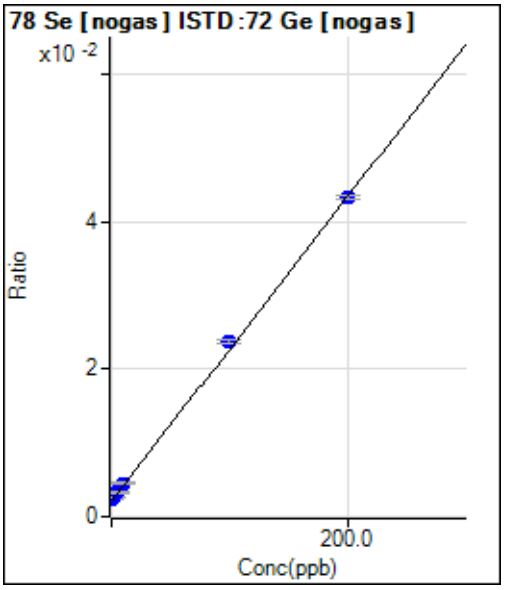
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73.33	0.0002	P	28.	
2	☐	2.000	2.236	120.00	0.0003	P	14.	11.8
3	☐	5.000	5.853	196.67	0.0005	P	2.8	17.1
4	☐	10.000	14.897	390.01	0.0009	P	5.0	49.0
5	☐	100.000	104.153	2306.88	0.0052	P	9.6	4.2
6	☐	200.000	197.655	4367.41	0.0097	P	5.9	-1.2
7	☐	1.000						

y = 4.8119E-005 * x + 1.7323E-004
R = 0.9995
DL = 3.074 ppb
BEC = 3.6 ppb

Weight: <None>
Min Conc: <None>

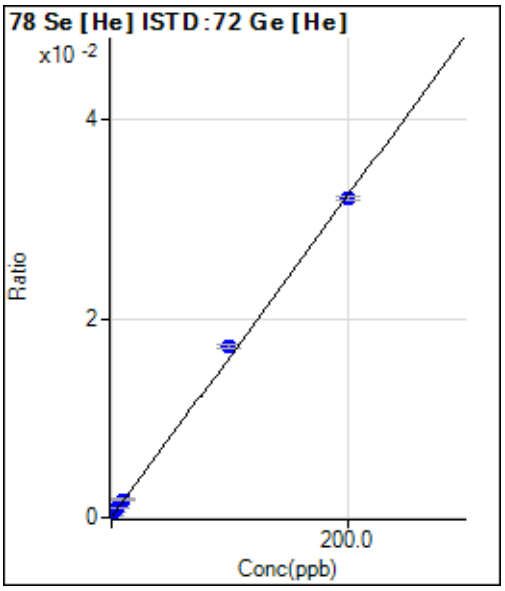


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2603.60	0.0023	P	8.5	
2	☐	2.000	1.649	2997.03	0.0027	P	1.9	-17.6
3	☐	5.000	4.967	3760.55	0.0034	P	7.3	-0.7
4	☐	10.000	10.676	5144.31	0.0046	P	7.9	6.8
5	☐	100.000	103.113	27626.06	0.0236	P	2.1	3.1
6	☐	200.000	198.414	51636.86	0.0433	P	0.9	-0.8
7	☐	1.000						

y = 2.0652E-004 * x + 0.0023
R = 0.9998
DL = 2.904 ppb
BEC = 11.37 ppb

Weight: <None>
Min Conc: <None>

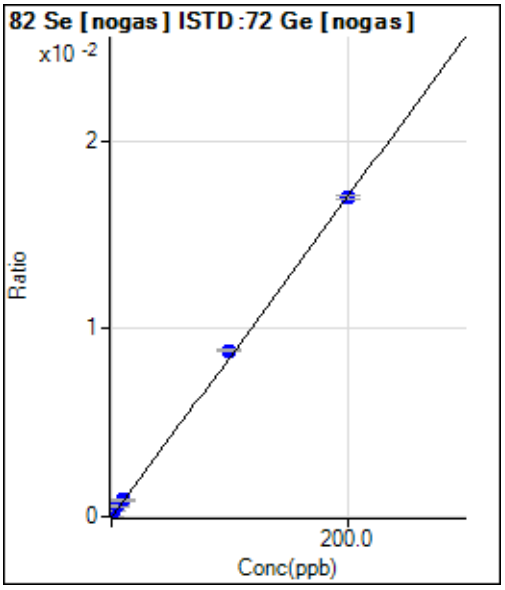
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.33	0.0002	P	10.	
2	☐	2.000	2.075	225.33	0.0005	P	3.1	3.8
3	☐	5.000	4.623	406.01	0.0009	P	6.7	-7.5
4	☐	10.000	10.111	800.02	0.0018	P	7.2	1.1
5	☐	100.000	105.353	7655.32	0.0172	P	1.4	5.4
6	☐	200.000	197.327	14469.04	0.0321	P	1.3	-1.3
7	☐	1.000						

y = 1.6159E-004 * x + 1.9180E-004
R = 0.9995
DL = 0.3604 ppb
BEC = 1.187 ppb

Weight: <None>
Min Conc: <None>

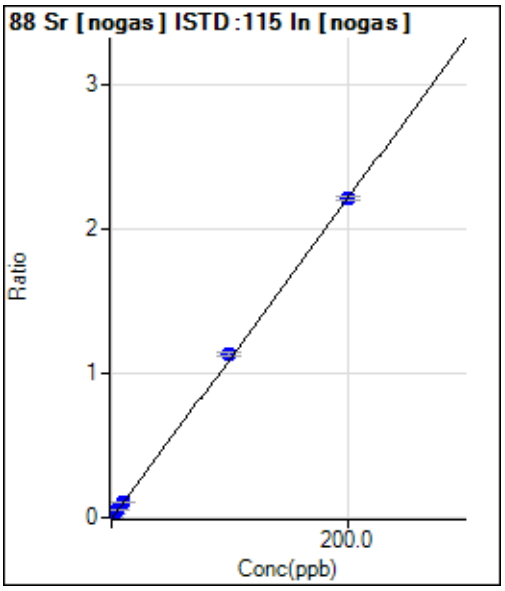


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	25.	
2	☐	2.000	3.079	340.01	0.0003	P	5.1	54.0
3	☐	5.000	6.224	640.03	0.0006	P	20.	24.5
4	☐	10.000	9.972	1010.06	0.0009	P	7.9	-0.3
5	☐	100.000	102.871	10320.40	0.0088	P	1.2	2.9
6	☐	200.000	198.524	20264.12	0.0170	P	1.1	-0.7
7	☐	1.000						

y = 8.5432E-005 * x + 4.2141E-005
R = 0.9999
DL = 0.3743 ppb
BEC = 0.4933 ppb

Weight: <None>
Min Conc: <None>

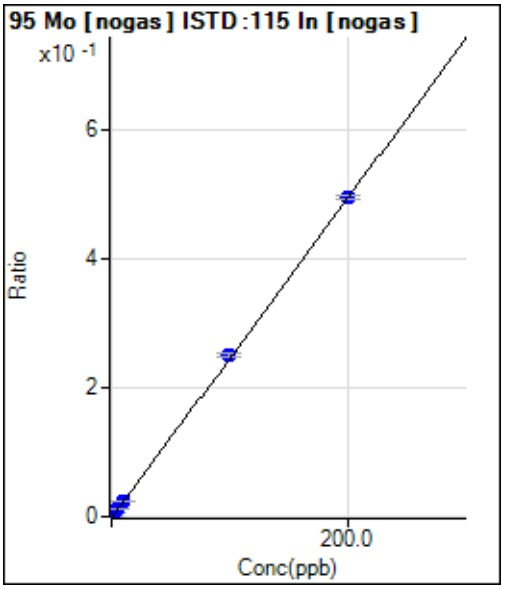
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	303.34	0.0003	P	17.	
2	☐	2.000	2.113	28801.66	0.0238	P	4.0	5.6
3	☐	5.000	5.021	67621.76	0.0562	P	3.6	0.4
4	☐	10.000	9.999	137698.60	0.1116	P	1.6	0.0
5	☐	100.000	101.989	1426060.92	1.1361	P	1.9	2.0
6	☐	200.000	199.004	2825632.87	2.2166	P	0.9	-0.5
7	☐	1.000						

y = 0.0111 * x + 2.5409E-004
R = 0.9999
DL = 0.01161 ppb
BEC = 0.02281 ppb

Weight: <None>
Min Conc: <None>

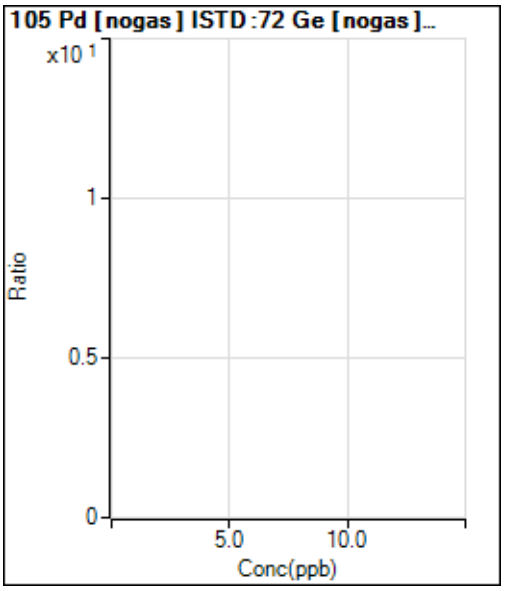


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	51.	
2	☐	2.000	2.064	6334.81	0.0052	P	4.1	3.2
3	☐	5.000	5.025	15124.75	0.0126	P	0.7	0.5
4	☐	10.000	9.936	30518.77	0.0247	P	4.3	-0.6
5	☐	100.000	101.002	314268.15	0.2504	P	2.1	1.0
6	☐	200.000	199.501	630208.86	0.4944	P	0.7	-0.2
7	☐	1.000						

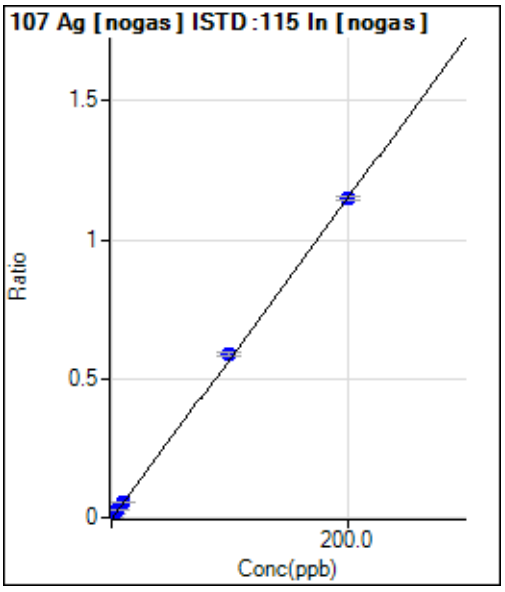
y = 0.0025 * x + 1.1739E-004
R = 1.0000
DL = 0.07375 ppb
BEC = 0.04738 ppb

Weight: <None>
Min Conc: <None>

Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0001	P	37.	
2	☐	2.000	2.125	14937.94	0.0123	P	7.1	6.3
3	☐	5.000	5.148	35874.44	0.0298	P	2.5	3.0
4	☐	10.000	10.060	71776.50	0.0582	P	1.2	0.6
5	☐	100.000	102.156	740983.63	0.5903	P	2.4	2.2
6	☐	200.000	198.914	1465182.22	1.1493	P	1.6	-0.5
7	☐	1.000						

y = 0.0058 * x + 5.8577E-005

R = 0.9999

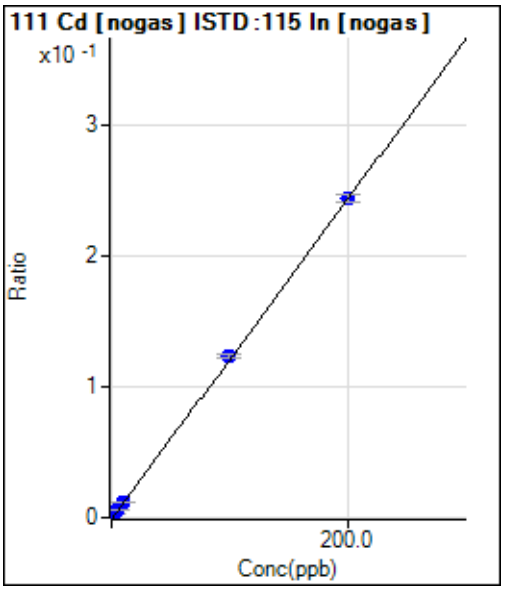
DL = 0.01138 ppb

BEC = 0.01014 ppb

Weight: <None>

Min Conc: <None>

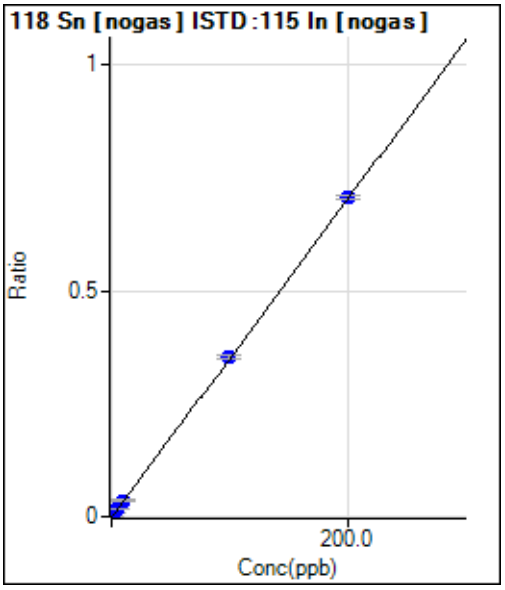
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.171	3210.43	0.0027	P	14.	8.5
3	☐	5.000	5.113	7518.75	0.0062	P	4.3	2.3
4	☐	10.000	9.731	14664.26	0.0119	P	3.2	-2.7
5	☐	100.000	101.033	154920.20	0.1234	P	3.1	1.0
6	☐	200.000	199.492	310679.99	0.2437	P	2.3	-0.3
7	☐	1.000						

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

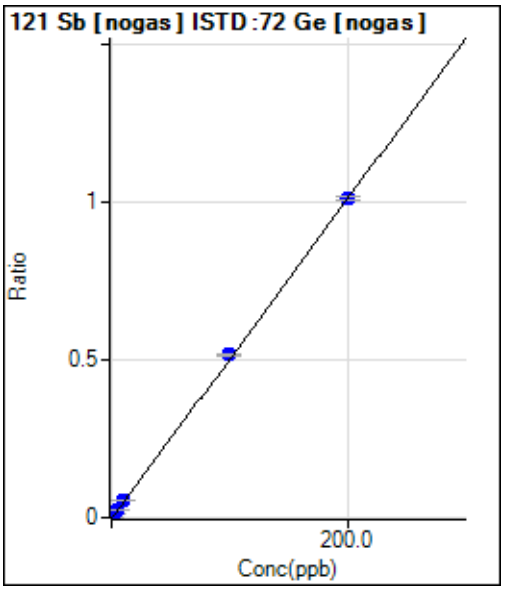


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1900.16	0.0016	P	5.8	
2	☐	2.000	2.028	10587.39	0.0087	P	2.2	1.4
3	☐	5.000	4.868	22571.23	0.0188	P	2.0	-2.6
4	☐	10.000	9.735	44298.20	0.0359	P	2.1	-2.6
5	☐	100.000	99.840	443819.49	0.3535	P	3.3	-0.2
6	☐	200.000	200.096	901184.36	0.7069	P	1.2	0.0
7	☐	1.000						

y = 0.0035 * x + 0.0016
R = 1.0000
DL = 0.07896 ppb
BEC = 0.4515 ppb

Weight: <None>
Min Conc: <None>

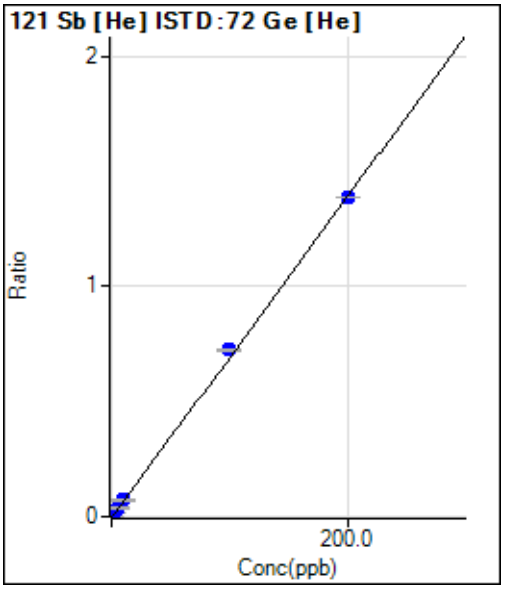
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1243.41	0.0011	P	12.	
2	☐	2.000	2.202	13686.70	0.0123	P	2.4	10.1
3	☐	5.000	5.117	30155.10	0.0271	P	1.2	2.3
4	☐	10.000	10.269	60065.39	0.0532	P	2.3	2.7
5	☐	100.000	101.670	603649.60	0.5164	P	1.1	1.7
6	☐	200.000	199.146	1204321.39	1.0104	P	1.1	-0.4
7	☐	1.000						

y = 0.0051 * x + 0.0011
R = 1.0000
DL = 0.08544 ppb
BEC = 0.2216 ppb

Weight: <None>
Min Conc: <None>

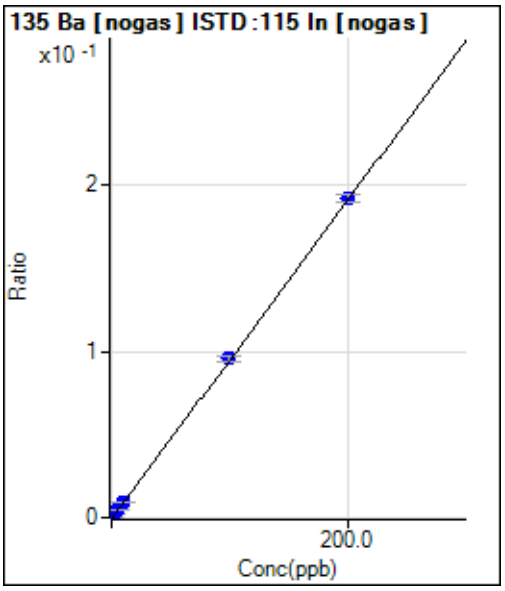


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	643.36	0.0015	P	16.	
2	☐	2.000	2.242	7345.32	0.0172	P	1.9	12.1
3	☐	5.000	5.137	16175.98	0.0374	P	3.2	2.7
4	☐	10.000	9.976	31214.03	0.0712	P	1.1	-0.2
5	☐	100.000	103.364	321811.23	0.7237	P	1.6	3.4
6	☐	200.000	198.313	625702.96	1.3871	P	0.6	-0.8
7	☐	1.000						

y = 0.0070 * x + 0.0015
R = 0.9998
DL = 0.1091 ppb
BEC = 0.2178 ppb

Weight: <None>
Min Conc: <None>

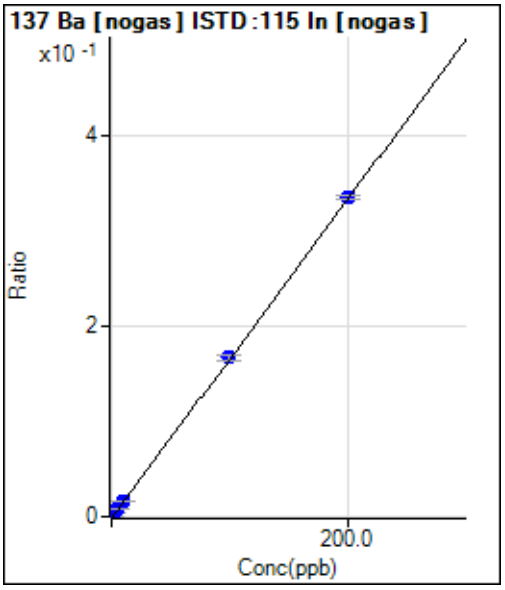
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	50.00	0.0000	P	34.	
2	☐	2.000	1.976	2343.57	0.0019	P	9.6	-1.2
3	☐	5.000	4.970	5784.61	0.0048	P	1.7	-0.6
4	☐	10.000	9.784	11621.55	0.0094	P	1.2	-2.2
5	☐	100.000	99.627	119933.93	0.0955	P	3.0	-0.4
6	☐	200.000	200.198	244693.95	0.1919	P	1.9	0.1
7	☐	1.000						

y = 9.5854E-004 * x + 4.1873E-005
R = 1.0000
DL = 0.04532 ppb
BEC = 0.04368 ppb

Weight: <None>
Min Conc: <None>

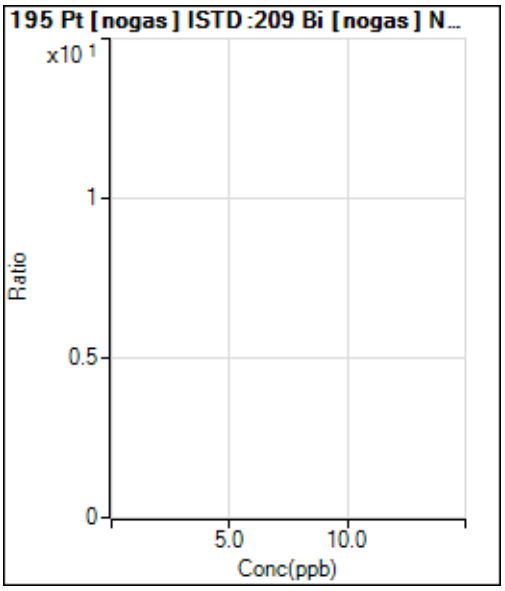


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73.33	0.0001	P	15.	
2	☐	2.000	2.054	4247.39	0.0035	P	10.	2.7
3	☐	5.000	5.106	10387.34	0.0086	P	1.6	2.1
4	☐	10.000	9.848	20465.04	0.0166	P	2.0	-1.5
5	☐	100.000	99.609	209927.02	0.1672	P	3.5	-0.4
6	☐	200.000	200.200	428396.77	0.3360	P	1.7	0.1
7	☐	1.000						

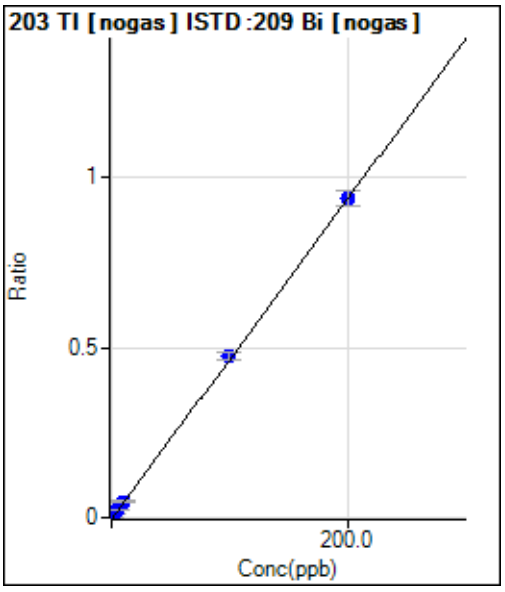
y = 0.0017 * x + 6.1397E-005
R = 1.0000
DL = 0.01692 ppb
BEC = 0.03659 ppb

Weight: <None>
Min Conc: <None>

Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

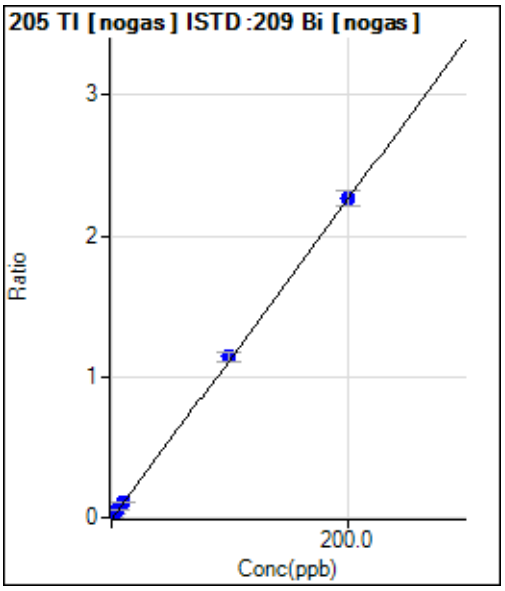


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	58.	
2	☐	2.000	2.065	10994.60	0.0098	P	5.2	3.3
3	☐	5.000	4.988	26602.96	0.0235	P	7.4	-0.2
4	☐	10.000	9.955	53829.52	0.0469	P	5.6	-0.4
5	☐	100.000	101.379	563069.87	0.4779	P	4.6	1.4
6	☐	200.000	199.312	1120761.08	0.9395	P	4.8	-0.3
7	☐	1.000						

y = 0.0047 * x + 2.4030E-005
R = 1.0000
DL = 0.008877 ppb
BEC = 0.005098 ppb

Weight: <None>
Min Conc: <None>

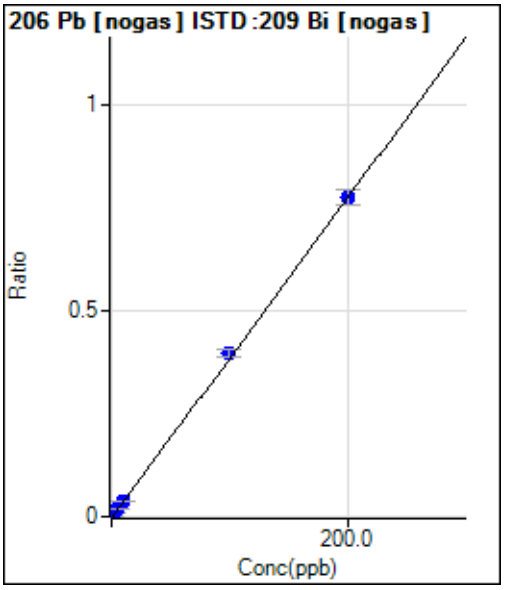
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0001	P	36.	
2	☐	2.000	2.086	26773.17	0.0238	P	6.8	4.3
3	☐	5.000	4.862	62530.28	0.0553	P	5.5	-2.8
4	☐	10.000	9.890	128813.08	0.1124	P	5.2	-1.1
5	☐	100.000	100.681	1346600.16	1.1429	P	5.7	0.7
6	☐	200.000	199.668	2703665.43	2.2664	P	5.3	-0.2
7	☐	1.000						

y = 0.0114 * x + 9.4040E-005
R = 1.0000
DL = 0.009104 ppb
BEC = 0.008285 ppb

Weight: <None>
Min Conc: <None>

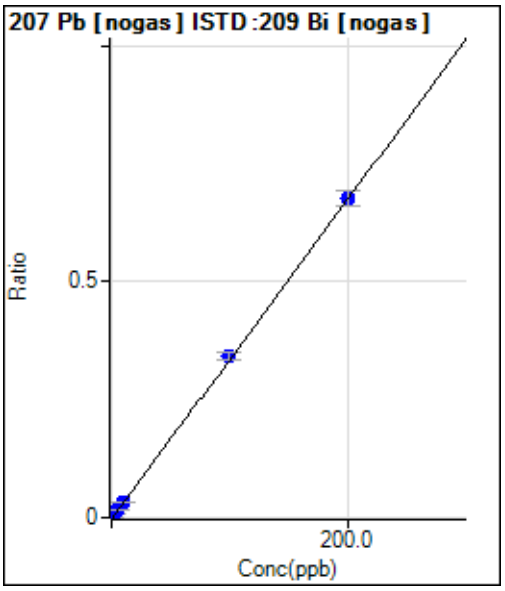


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0002	P	10.	
2	☐	2.000	2.081	9356.70	0.0083	P	8.7	4.1
3	☐	5.000	4.916	21881.21	0.0194	P	7.2	-1.7
4	☐	10.000	9.675	43466.23	0.0379	P	4.3	-3.3
5	☐	100.000	101.696	467133.43	0.3965	P	4.6	1.7
6	☐	200.000	199.170	926021.68	0.7763	P	5.3	-0.4
7	☐	1.000						

y = 0.0039 * x + 2.0209E-004
R = 0.9999
DL = 0.01553 ppb
BEC = 0.05186 ppb

Weight: <None>
Min Conc: <None>

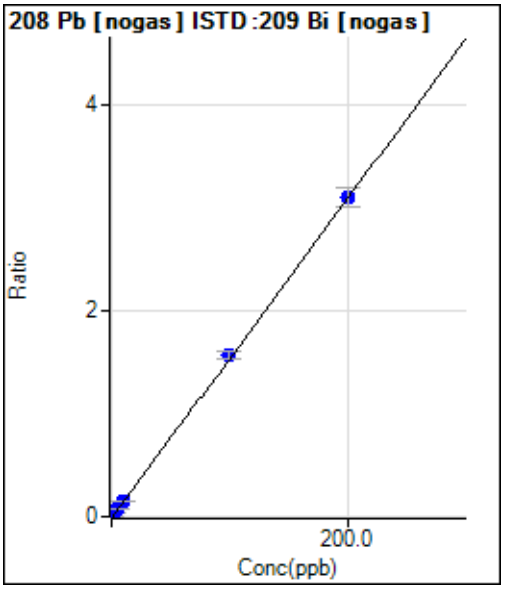
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.67	0.0001	P	13.	
2	☐	2.000	2.052	7962.47	0.0071	P	4.3	2.6
3	☐	5.000	4.793	18502.89	0.0164	P	6.5	-4.1
4	☐	10.000	9.672	37732.46	0.0329	P	5.9	-3.3
5	☐	100.000	100.897	403459.29	0.3424	P	4.3	0.9
6	☐	200.000	199.573	807778.69	0.6771	P	5.2	-0.2
7	☐	1.000						

y = 0.0034 * x + 1.0536E-004
R = 1.0000
DL = 0.01233 ppb
BEC = 0.03106 ppb

Weight: <None>
Min Conc: <None>

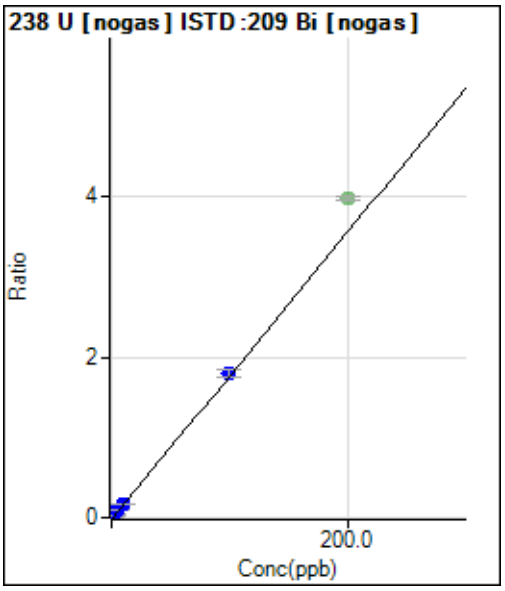


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	770.03	0.0007	P	9.5	
2	☐	2.000	2.069	36960.35	0.0328	P	7.3	3.4
3	☐	5.000	4.924	87271.65	0.0772	P	5.5	-1.5
4	☐	10.000	9.778	174906.59	0.1525	P	5.0	-2.2
5	☐	100.000	100.782	1845100.41	1.5659	P	4.5	0.8
6	☐	200.000	199.621	3699075.70	3.1009	P	5.5	-0.2
7	☐	1.000						

y = 0.0155 * x + 6.9682E-004
R = 1.0000
DL = 0.01281 ppb
BEC = 0.04487 ppb

Weight: <None>
Min Conc: <None>

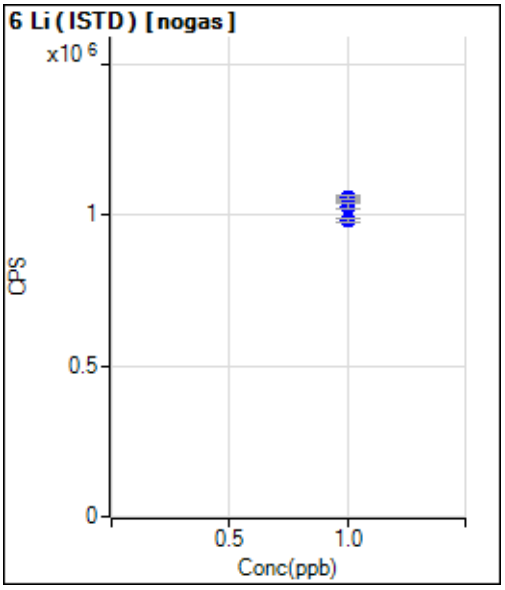
Calibration for 021_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	33.	
2	☐	2.000	2.010	40645.50	0.0361	P	6.0	0.5
3	☐	5.000	4.838	98161.78	0.0868	P	5.7	-3.2
4	☐	10.000	9.664	198774.95	0.1734	P	5.1	-3.4
5	☐	100.000	100.042	2114238.19	1.7943	P	5.6	0.0
6	☑	200.000		4756195.34	3.9859	A	1.2	
7	☐	1.000						

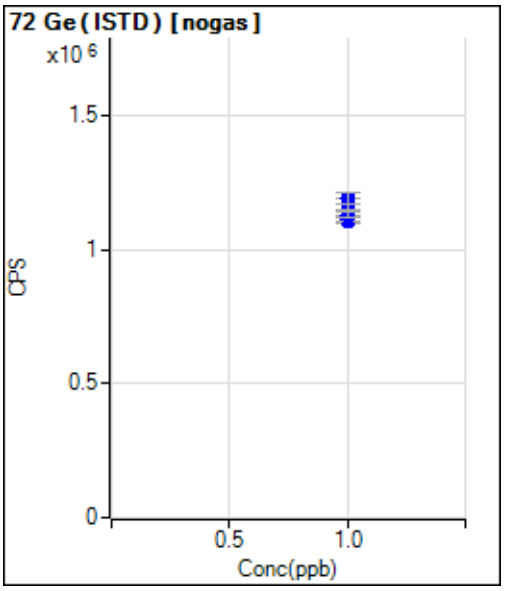
y = 0.0179 * x + 3.3266E-005
R = 1.0000
DL = 0.001876 ppb
BEC = 0.001855 ppb

Weight: <None>
Min Conc: <None>

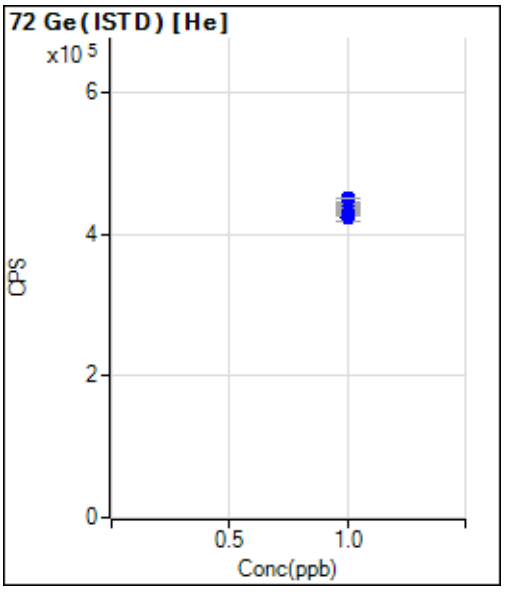


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1052078.48		P	0.9	
2	☐	1.000		1057950.27		P	0.8	
3	☐	1.000		1055529.21		P	0.5	
4	☐	1.000		1056599.40		P	0.9	
5	☐	1.000		1029134.84		P	1.9	
6	☐	1.000		981397.24		P	1.2	
7	☐	1.000						

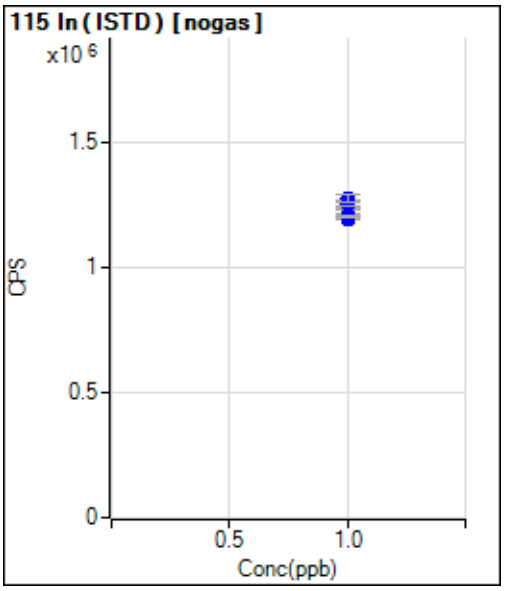
Calibration for 021_ICV.d



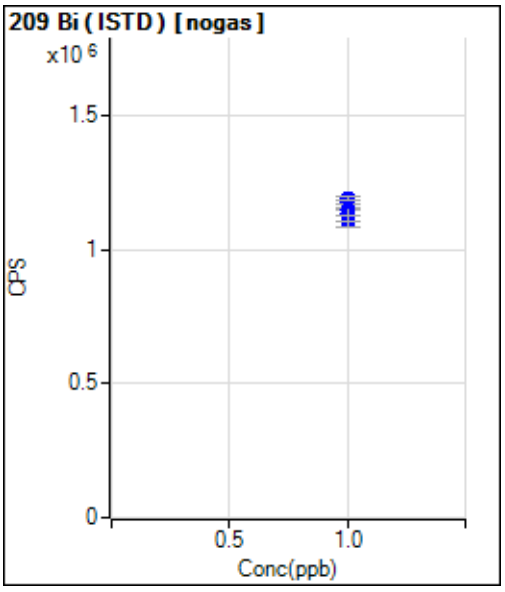
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1108445.09		P	1.7	
2	☐	1.000		1114158.71		P	2.1	
3	☐	1.000		1114670.74		P	1.1	
4	☐	1.000		1129502.56		P	1.8	
5	☐	1.000		1169046.91		P	3.8	
6	☐	1.000		1192115.66		P	3.6	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		423647.24		P	2.0	
2	☐	1.000		427429.09		P	0.6	
3	☐	1.000		432374.03		P	0.5	
4	☐	1.000		438255.49		P	0.6	
5	☐	1.000		444678.73		P	0.8	
6	☐	1.000		451083.14		P	0.6	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1193955.10		P	0.4	
2	☐	1.000		1211017.39		P	0.6	
3	☐	1.000		1203630.55		P	0.6	
4	☐	1.000		1233698.45		P	0.9	
5	☐	1.000		1255094.19		P	1.5	
6	☐	1.000		1274614.41		P	2.0	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1107740.19		P	3.9	
2	☐	1.000		1127973.16		P	3.4	
3	☐	1.000		1132620.97		P	4.0	
4	☐	1.000		1147868.60		P	3.6	
5	☐	1.000		1178555.69		P	1.2	
6	☐	1.000		1193356.24		P	1.0	
7	☐	1.000						

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	014CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:35:41-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	28	95.14
B	11	1	nogas	9870	0.04
Al	27	1	nogas	25922	0.02
P	31	1	nogas	24790	0.01
Ti	47	1	nogas	127	15.69
Ni	60	1	nogas	370	4.79
Cu	63	1	nogas	24631	0.00
Zn	66	1	nogas	1273	0.84
Se	77	1	nogas	3534	0.13
Se	82	1	nogas	47	53.02
Sr	88	1	nogas	303	5.58
Mo	95	1	nogas	140	36.79
Ag	107	1	nogas	70	53.99
Sn	118	1	nogas	1900	0.29
Sb	121	1	nogas	1243	0.93
Ba	137	1	nogas	73	21.47
Tl	205	1	nogas	103	32.89
Pb	208	1	nogas	770	0.77
Li	7	1	nogas	73741	0.00
Na	23	2	He	39006	0.01
Mg	24	2	He	580	0.59
Al	27	2	He	1733	0.33
K	39	2	He	109759	0.00
Ca	43	2	He	33	187.35
Ca	44	2	He	1487	0.75
V	51	2	He	3618	0.14
Cr	52	2	He	11161	0.07
Mn	55	2	He	450	3.73
Fe	56	2	He	14387	0.04
Co	59	2	He	30	111.11
Ni	60	2	He	97	53.87
Cu	63	2	He	11431	0.03
Zn	66	2	He	633	2.56
As	75	2	He	264	4.43
Sb	121	2	He	643	2.30
Se	78	2	He	81	14.29

QC ISTD Table

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	nogas	1108445	1.66
In	115	1	nogas	1193955	0.40
Li	6	1	nogas	1052078	0.88

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	nogas	1107740	3.91
Ge	72	2	He	423647	1.96

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	015CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:37:46-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	10055	0.02
B	11	1	nogas	39585	0.00
Al	27	1	nogas	70414	0.00
P	31	1	nogas	26170	0.01
Ti	47	1	nogas	1963	0.31
Ni	60	1	nogas	6181	0.03
Cu	63	1	nogas	36929	0.01
Zn	66	1	nogas	5788	0.08
Se	77	1	nogas	3977	0.17
Se	82	1	nogas	340	1.50
Sr	88	1	nogas	28802	0.01
Mo	95	1	nogas	6335	0.06
Ag	107	1	nogas	14938	0.05
Cd	111	1	nogas	3210	0.44
Sn	118	1	nogas	10587	0.03
Sb	121	1	nogas	13687	0.02
Ba	137	1	nogas	4247	0.22
Tl	205	1	nogas	26773	0.01
Pb	208	1	nogas	36960	0.01
Na	23	2	He	402159	0.00
Mg	24	2	He	209112	0.00
Al	27	2	He	4914	0.09
K	39	2	He	328058	0.00
Ca	43	2	He	590	2.83
Ca	44	2	He	10977	0.01
V	51	2	He	13296	0.01
Cr	52	2	He	21469	0.00
Mn	55	2	He	9403	0.05
Fe	56	2	He	973274	0.00
Co	59	2	He	12162	0.03
Ni	60	2	He	3247	0.07
Cu	63	2	He	18872	0.02
Zn	66	2	He	2700	0.34
As	75	2	He	1430	0.07
Sb	121	2	He	7345	0.03
Se	78	2	He	225	1.59

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1114159	2.07	1108445	100.52	70	120	
In	115	1	nogas	1211017	0.61	1193955	101.43	70	120	
Li	6	1	nogas	1057950	0.81	1052078	100.56	70	120	
Bi	209	1	nogas	1127973	3.42	1107740	101.83	70	120	
Ge	72	2	He	427429	0.63	423647	100.89	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:39:48-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	24329	0.01
B	11	1	nogas	81281	0.00
Al	27	1	nogas	116864	0.00
P	31	1	nogas	26857	0.01
Ti	47	1	nogas	4651	0.10
Ni	60	1	nogas	12555	0.04
Cu	63	1	nogas	53485	0.00
Zn	66	1	nogas	10440	0.05
Se	77	1	nogas	3727	0.30
Se	82	1	nogas	640	3.30
Sr	88	1	nogas	67622	0.01
Mo	95	1	nogas	15125	0.01
Ag	107	1	nogas	35874	0.01
Cd	111	1	nogas	7519	0.06
Sn	118	1	nogas	22571	0.01
Sb	121	1	nogas	30155	0.00
Ba	137	1	nogas	10387	0.02
Tl	205	1	nogas	62530	0.00
Pb	208	1	nogas	87272	0.00
Na	23	2	He	892109	0.00
Mg	24	2	He	495706	0.00
Al	27	2	He	7785	0.04
K	39	2	He	626048	0.00
Ca	43	2	He	1470	0.67
Ca	44	2	He	25114	0.00
V	51	2	He	26271	0.01
Cr	52	2	He	35636	0.01
Mn	55	2	He	21202	0.01
Fe	56	2	He	2273332	0.00
Co	59	2	He	29369	0.01
Ni	60	2	He	7155	0.05
Cu	63	2	He	27920	0.00
Zn	66	2	He	4834	0.09
As	75	2	He	3251	0.08
Sb	121	2	He	16176	0.02
Se	78	2	He	406	1.79

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1114671	1.07	1108445	100.56	70	120	
In	115	1	nogas	1203631	0.61	1193955	100.81	70	120	
Li	6	1	nogas	1055529	0.51	1052078	100.33	70	120	
Bi	209	1	nogas	1132621	3.99	1107740	102.25	70	120	
Ge	72	2	He	432374	0.52	423647	102.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/1000
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:41:50-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	49480	0.00
B	11	1	nogas	155470	0.00
Al	27	1	nogas	202660	0.00
P	31	1	nogas	27528	0.01
Ti	47	1	nogas	9380	0.06
Ni	60	1	nogas	27165	0.02
Cu	63	1	nogas	84051	0.00
Zn	66	1	nogas	19536	0.00
Se	77	1	nogas	4131	0.11
Se	82	1	nogas	1010	0.85
Sr	88	1	nogas	137699	0.00
Mo	95	1	nogas	30519	0.02
Ag	107	1	nogas	71776	0.00
Cd	111	1	nogas	14664	0.03
Sn	118	1	nogas	44298	0.00
Sb	121	1	nogas	60065	0.01
Ba	137	1	nogas	20465	0.01
Tl	205	1	nogas	128813	0.00
Pb	208	1	nogas	174907	0.00
Na	23	2	He	1760618	0.00
Mg	24	2	He	999495	0.00
Al	27	2	He	13413	0.01
K	39	2	He	1149514	0.00
Ca	43	2	He	2757	0.08
Ca	44	2	He	48825	0.00
V	51	2	He	49275	0.00
Cr	52	2	He	60899	0.00
Mn	55	2	He	43205	0.00
Fe	56	2	He	5346252	0.00
Co	59	2	He	58470	0.00
Ni	60	2	He	14400	0.02
Cu	63	2	He	44533	0.00
Zn	66	2	He	9126	0.07
As	75	2	He	6254	0.04
Sb	121	2	He	31214	0.00
Se	78	2	He	800	0.89

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1129503	1.83	1108445	101.90	70	120	
In	115	1	nogas	1233698	0.93	1193955	103.33	70	120	
Li	6	1	nogas	1056599	0.94	1052078	100.43	70	120	
Bi	209	1	nogas	1147869	3.55	1107740	103.62	70	120	
Ge	72	2	He	438255	0.55	423647	103.45	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	018CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:43:53-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	508295	0.00
B	11	1	nogas	1494730	0.00
Al	27	1	nogas	2011486	0.00
P	31	1	nogas	58645	0.00
Ti	47	1	nogas	95899	0.00
Ni	60	1	nogas	264931	0.00
Cu	63	1	nogas	653015	0.00
Zn	66	1	nogas	185593	0.00
Se	77	1	nogas	11625	0.04
Se	82	1	nogas	10320	0.03
Sr	88	1	nogas	1426061	0.00
Mo	95	1	nogas	314268	0.00
Ag	107	1	nogas	740984	0.00
Cd	111	1	nogas	154920	0.00
Sn	118	1	nogas	443819	0.00
Sb	121	1	nogas	603650	0.00
Ba	137	1	nogas	209927	0.00
Tl	205	1	nogas	1346600	0.00
Pb	208	1	nogas	1845100	0.00
Na	23	2	He	18645024	0.00
Mg	24	2	He	10963916	0.00
Al	27	2	He	130974	0.00
K	39	2	He	11886883	0.00
Ca	43	2	He	29071	0.00
Ca	44	2	He	480401	0.00
V	51	2	He	471886	0.00
Cr	52	2	He	502763	0.00
Mn	55	2	He	431737	0.00
Fe	56	2	He	51270621	0.00
Co	59	2	He	584501	0.00
Ni	60	2	He	140858	0.00
Cu	63	2	He	359688	0.00
Zn	66	2	He	84639	0.00
As	75	2	He	64006	0.00
Sb	121	2	He	321811	0.00
Se	78	2	He	7655	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1169047	3.84	1108445	105.47	70	120	
In	115	1	nogas	1255094	1.49	1193955	105.12	70	120	
Li	6	1	nogas	1029135	1.90	1052078	97.82	70	120	
Bi	209	1	nogas	1178556	1.20	1107740	106.39	70	120	
Ge	72	2	He	444679	0.85	423647	104.96	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	019CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:45:56-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	989807	0.00
B	11	1	nogas	2965923	0.00
Al	27	1	nogas	2539470	0.00
P	31	1	nogas	89195	0.00
Ti	47	1	nogas	192296	0.00
Ni	60	1	nogas	521021	0.00
Cu	63	1	nogas	1247734	0.00
Zn	66	1	nogas	355714	0.00
Se	77	1	nogas	19036	0.02
Se	82	1	nogas	20264	0.01
Sr	88	1	nogas	2825633	0.00
Mo	95	1	nogas	630209	0.00
Ag	107	1	nogas	1465182	0.00
Cd	111	1	nogas	310680	0.00
Sn	118	1	nogas	901184	0.00
Sb	121	1	nogas	1204321	0.00
Ba	137	1	nogas	428397	0.00
Tl	205	1	nogas	2703665	0.00
Pb	208	1	nogas	3699076	0.00
Na	23	2	He	36389145	0.00
Mg	24	2	He	21024539	0.00
Al	27	2	He	166965	0.00
K	39	2	He	23050932	0.00
Ca	43	2	He	57660	0.00
Ca	44	2	He	956160	0.00
V	51	2	He	936613	0.00
Cr	52	2	He	978119	0.00
Mn	55	2	He	850665	0.00
Fe	56	2	He	99159649	0.00
Co	59	2	He	1167430	0.00
Ni	60	2	He	278010	0.00
Cu	63	2	He	690034	0.00
Zn	66	2	He	162399	0.00
As	75	2	He	123562	0.00
Sb	121	2	He	625703	0.00
Se	78	2	He	14469	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1192116	3.63	1108445	107.55	70	120	
In	115	1	nogas	1274614	2.03	1193955	106.76	70	120	
Li	6	1	nogas	981397	1.23	1052078	93.28	70	120	
Bi	209	1	nogas	1193356	1.00	1107740	107.73	70	120	
Ge	72	2	He	451083	0.59	423647	106.48	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV2
Data File Name	023LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:57:26-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	1.933	1.874	10208	2.21	2	96.6	70	120	
B	11	1	nogas	18.171	2.418	66759	1.64	10	181.7	70	120	NewName Main CR1 Failed
Al	27	1	nogas	3.379	3.851	71295	0.88	2	168.9	70	120	NewName Main CR1 Failed
P	31	1	nogas	18.156	129.372	26230	3.34	10	181.6	70	120	NewName Main CR1 Failed
Ti	47	1	nogas	2.136	11.281	2074	11.18	2	106.8	70	120	
Ni	60	1	nogas	2.376	3.125	6261	4.97	2	118.8	70	120	
Cu	63	1	nogas	0.405	30.943	27372	4.74	2	20.2	70	120	NewName Main CR1 Failed
Zn	66	1	nogas	2.553	2.337	5614	0.54	2	127.6	70	120	NewName Main CR1 Failed
Se	77	1	nogas	-12.218	-30.027	2704	11.40	2	-610.9	70	120	NewName Main CR1 Failed
Se	82	1	nogas	2.740	28.246	310	22.58	2	137.0	70	120	NewName Main CR1 Failed
Sr	88	1	nogas	2.108	4.240	29289	4.14	2	105.4	70	120	
Mo	95	1	nogas	2.210	6.996	6905	7.25	2	110.5	70	120	
Ag	107	1	nogas	2.115	0.957	15158	1.25	2	105.8	70	120	
Cd	111	1	nogas	2.001	3.153	3017	2.78	2	100.1	70	120	
Sn	118	1	nogas	2.379	2.950	12315	2.62	2	118.9	70	120	
Sb	121	1	nogas	2.885	3.601	17714	2.44	2	144.3	70	120	NewName Main CR1 Failed
Ba	137	1	nogas	1.962	5.529	4141	5.63	2	98.1	70	120	
Tl	205	1	nogas	2.055	6.829	26800	3.10	2	102.7	70	120	
Pb	208	1	nogas	2.101	5.441	38152	1.83	2	105.0	70	120	
Pb	206	1	nogas	2.107	7.900	9627	4.47	2	105.4	70	120	
Pb	207	1	nogas	2.072	8.812	8163	5.73	2	103.6	70	120	
U	238	1	nogas	1.865	6.671	41725	2.90	2	93.3	70	120	
Li	7	1	nogas	2.021	2.619	108678	1.27	2	101.0	70	120	
Ba	135	1	nogas	2.120	5.062	2560	5.37	2	106.0	70	120	
Tl	203	1	nogas	2.043	8.779	11045	5.13	2	102.2	70	120	
Na	23	2	He	207.028	0.537	404347	0.37	200	103.5	70	120	
Mg	24	2	He	204.875	1.435	210007	1.67	200	102.4	70	120	
Al	27	2	He	2.498	11.012	4918	7.25	2	124.9	70	120	NewName Main CR1 Failed
K	39	2	He	200.466	1.414	335125	0.68	200	100.2	70	120	
Ca	43	2	He	217.811	14.360	640	13.35	200	108.9	70	120	
Ca	44	2	He	210.565	2.294	11218	2.21	200	105.3	70	120	
V	51	2	He	1.888	2.542	12198	1.52	2	94.4	70	120	
Cr	52	2	He	2.077	4.755	21142	1.93	2	103.8	70	120	
Mn	55	2	He	2.144	0.620	9273	0.39	2	107.2	70	120	
Fe	56	2	He	200.355	0.690	978933	0.67	200	100.2	70	120	
Co	59	2	He	2.170	1.397	12245	1.13	2	108.5	70	120	
Ni	60	2	He	2.215	7.143	3074	6.67	2	110.8	70	120	
Cu	63	2	He	0.696	11.445	13983	2.10	2	34.8	70	120	NewName Main CR1 Failed
Zn	66	2	He	2.458	4.774	2580	3.38	2	122.9	70	120	NewName Main CR1 Failed
As	75	2	He	2.053	6.769	1499	5.59	2	102.7	70	120	
Se	77	2	He	0.869	281.364	93	54.98	2	43.4	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.866	2.840	9343	2.78	2	143.3	70	120	NewName Main CR1 Failed
Se	78	2	He	2.439	24.543	254	16.27	2	122.0	70	120	NewName Main CR1 Failed
Ti	47	2	He	2.067	8.864	483	8.36	2	103.3	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1125352	2.12	1108445	101.53	70	120	
In	115	1	nogas	1234489	0.41	1193955	103.39	70	120	
Li	6	1	nogas	1048877	0.42	1052078	99.70	70	120	
Bi	209	1	nogas	1146448	3.85	1107740	103.49	70	120	
Ge	72	2	He	433610	0.27	423647	102.35	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV5
Data File Name	024LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T10:59:28-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.605	0.990	24339	1.60	5	92.1	70	130	
B	11	1	nogas	28.122	1.574	98166	1.93	25	112.5	70	130	
Al	27	1	nogas	6.815	1.143	116666	2.27	5	136.3	70	130	NewName Main CR1 Failed
P	31	1	nogas	37.959	39.425	27335	3.77	25	151.8	70	130	NewName Main CR1 Failed
Ti	47	1	nogas	5.036	6.737	4694	5.84	5	100.7	70	130	
Ni	60	1	nogas	5.179	1.421	13153	2.80	5	103.6	70	130	
Cu	63	1	nogas	3.435	0.514	44830	1.43	5	68.7	70	130	NewName Main CR1 Failed
Zn	66	1	nogas	5.485	1.457	10541	2.17	5	109.7	70	130	
Se	77	1	nogas	-3.617	-38.265	3314	2.64	5	-72.3	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.866	15.502	610	15.81	5	117.3	70	130	
Sr	88	1	nogas	4.983	2.022	67976	1.74	5	99.7	70	130	
Mo	95	1	nogas	5.031	1.981	15342	1.29	5	100.6	70	130	
Ag	107	1	nogas	5.052	1.729	35667	1.91	5	101.0	70	130	
Cd	111	1	nogas	4.991	6.834	7432	6.16	5	99.8	70	130	
Sn	118	1	nogas	5.136	1.576	24020	2.14	5	102.7	70	130	
Sb	121	1	nogas	5.590	2.226	33032	3.49	5	111.8	70	130	
Ba	137	1	nogas	5.071	2.117	10454	2.90	5	101.4	70	130	
Tl	205	1	nogas	5.001	5.428	64228	1.42	5	100.0	70	130	
Pb	208	1	nogas	5.007	5.486	88628	1.26	5	100.1	70	130	
U	238	1	nogas	4.467	4.573	98588	1.59	5	89.3	70	130	
Li	7	1	nogas	4.670	1.197	155118	0.64	5	93.4	70	130	
Na	23	2	He	487.388	1.428	903777	0.84	500	97.5	70	130	
Mg	24	2	He	482.884	1.501	497418	0.99	500	96.6	70	130	
Al	27	2	He	4.715	3.068	7759	2.98	5	94.3	70	130	
K	39	2	He	463.611	1.366	631682	0.49	500	92.7	70	130	
Ca	43	2	He	537.806	9.205	1540	8.52	500	107.6	70	130	
Ca	44	2	He	494.885	1.058	24470	0.75	500	99.0	70	130	
V	51	2	He	4.731	1.980	25156	1.36	5	94.6	70	130	
Cr	52	2	He	5.002	8.092	35038	5.04	5	100.0	70	130	
Mn	55	2	He	5.115	3.006	21626	2.36	5	102.3	70	130	
Fe	56	2	He	466.267	0.942	2273564	0.30	500	93.3	70	130	
Co	59	2	He	5.057	1.328	28688	0.94	5	101.1	70	130	
Ni	60	2	He	5.137	4.190	7045	3.71	5	102.7	70	130	
Cu	63	2	He	3.603	7.133	23686	2.95	5	72.1	70	130	
Zn	66	2	He	5.370	1.584	4901	1.24	5	107.4	70	130	
As	75	2	He	4.989	4.488	3277	3.64	5	99.8	70	130	
Sb	121	2	He	5.634	2.972	17848	3.35	5	112.7	70	130	
Se	78	2	He	5.486	4.165	471	3.93	5	109.7	70	130	
Ti	47	2	He	4.907	6.186	1137	6.72	5	98.1	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1121275	1.43	1108445	101.16	70	120	
In	115	1	nogas	1219439	0.79	1193955	102.13	70	120	
Li	6	1	nogas	1051320	0.61	1052078	99.93	70	120	
Bi	209	1	nogas	1131349	4.35	1107740	102.13	70	120	
Ge	72	2	He	436491	0.64	423647	103.03	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	026_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T11:04:48-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.005	42.5	53	19.5	1	
B	11	1	nogas	2.543	9.0	17739	3.5	10	
Al	27	1	nogas	2.190	2.5	54185	1.6	5	
P	31	1	nogas	13.381	73.6	25355	1.6	10	ICB Main CR1 Failed
Ti	47	1	nogas	0.050	50.0	170	11.8	2.5	
Ni	60	1	nogas	0.021	132.3	417	14.7	2.5	
Cu	63	1	nogas	-1.748	-7.8	14487	5.1	1	
Zn	66	1	nogas	0.481	10.9	2060	5.6	2.5	
Se	77	1	nogas	-6.272	-3.8	3060	1.7	2.5	
Se	82	1	nogas	0.289	78.7	73	28.4	1	
Sr	88	1	nogas	0.031	8.3	713	5.7	2.5	
Mo	95	1	nogas	0.019	162.0	197	46.1	2.5	
Ag	107	1	nogas	0.007	68.0	117	26.2	2.5	
Cd	111	1	nogas	0.005	86.6	7	86.6	1	
Sn	118	1	nogas	0.194	15.0	2714	4.2	5	
Sb	121	1	nogas	0.187	1.7	2274	2.5	2	
Ba	137	1	nogas	0.100	24.6	273	18.4	2.5	
Tl	205	1	nogas	0.006	48.4	183	19.2	1	
Pb	208	1	nogas	0.024	14.6	1177	3.4	2.5	
U	238	1	nogas	0.006	20.7	173	13.3	2.5	
Na	23	2	He	3.182	18.1	44207	2.5	100	
Mg	24	2	He	1.459	10.7	2023	6.7	100	
Al	27	2	He	1.446	14.9	3487	6.6	5	
K	39	2	He	0.147	1145.8	109269	1.7	100	
Ca	43	2	He	6.174	157.3	50	52.9	100	
Ca	44	2	He	4.879	98.0	1697	13.4	100	
V	51	2	He	-0.099	-9.7	3167	2.3	2.5	
Cr	52	2	He	0.162	108.2	11835	6.1	2.5	
Mn	55	2	He	0.081	11.0	770	3.9	2.5	
Fe	56	2	He	2.771	2.4	27238	1.2	100	
Co	59	2	He	0.006	18.7	63	9.1	2.5	
Ni	60	2	He	0.075	41.9	193	20.9	2.5	
Cu	63	2	He	-1.387	-5.4	6935	2.5	1	
Zn	66	2	He	0.384	41.1	923	13.5	2.5	
As	75	2	He	-0.041	-84.3	239	9.1	2.5	
Sb	121	2	He	0.215	25.2	1273	13.2	2	
Se	78	2	He	-0.090	-114.1	75	9.4	1	
Ti	47	2	He	0.076	120.6	30	66.7	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1099166	1.76	1108445	99.16	70	120	
In	115	1	nogas	1193180	1.12	1193955	99.94	70	120	
Li	6	1	nogas	1045027	0.49	1052078	99.33	70	120	

Initial Calibration Blank (ICB) Report

Bi	209	1	nogas	1107509	3.96	1107740	99.98	70	120	
Ge	72	2	He	421047	0.97	423647	99.39	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	028ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T11:11:27-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.002	111.7	37	28.4	0	ICSA Main CR1 Failed
B	11	1	nogas	2.830	1.0	17987	0.9	0	ICSA Main CR1 Failed
Al	27	1	nogas	88964.315	2.0	1128910730	0.6	0	
P	31	1	nogas	1082078.060	2.4	61643172	0.7	0	
Ti	47	1	nogas	2216.457	0.6	1923117	2.5	0	
Ni	60	1	nogas	1.620	2.9	4184	4.9	0	ICSA Main CR1 Failed
Cu	63	1	nogas	-2.252	-4.3	11338	2.7	0	ICSA Main CR1 Failed
Zn	66	1	nogas	3.759	2.6	7295	0.4	0	ICSA Main CR1 Failed
Se	77	1	nogas	17.042	7.1	4601	2.8	0	
Se	82	1	nogas	1.113	34.1	147	21.9	0	ICSA Main CR1 Failed
Sr	88	1	nogas	4.934	2.1	61026	1.8	0	ICSA Main CR1 Failed
Mo	95	1	nogas	2422.590	1.8	6634698	1.5	0	
Ag	107	1	nogas	0.191	20.0	1280	18.0	0	ICSA Main CR1 Failed
Cd	111	1	nogas	2.864	0.9	3867	1.0	0	
Sn	118	1	nogas	0.270	12.0	2810	5.2	0	ICSA Main CR1 Failed
Sb	121	1	nogas	0.401	7.6	3384	5.9	0	ICSA Main CR1 Failed
Ba	137	1	nogas	0.753	11.7	1463	10.5	0	ICSA Main CR1 Failed
Tl	205	1	nogas	0.016	4.8	280	0.0	0	ICSA Main CR1 Failed
Pb	208	1	nogas	0.339	16.8	5954	12.3	0	ICSA Main CR1 Failed
Na	23	2	He	113169.881	0.5	188489324	0.3	0	
Mg	24	2	He	112061.979	1.4	108357632	1.5	0	
Al	27	2	He	64344.741	0.6	76599037	0.8	0	
K	39	2	He	111272.172	1.2	117075538	1.0	0	
Ca	43	2	He	102576.713	1.6	269976	1.3	0	
Ca	44	2	He	117277.412	0.7	5110031	0.7	0	
V	51	2	He	0.100	32.8	3931	3.6	0	ICSA Main CR1 Failed
Cr	52	2	He	1.769	10.8	18642	4.5	0	ICSA Main CR1 Failed
Mn	55	2	He	1.051	8.5	4524	7.7	0	ICSA Main CR1 Failed
Fe	56	2	He	110897.981	1.2	504887592	0.9	0	
Co	59	2	He	0.535	2.2	2880	2.4	0	ICSA Main CR1 Failed
Ni	60	2	He	1.152	9.2	1557	8.5	0	ICSA Main CR1 Failed
Cu	63	2	He	-2.054	-1.3	4684	2.0	0	ICSA Main CR1 Failed
Zn	66	2	He	2.950	4.2	2807	3.6	0	ICSA Main CR1 Failed
As	75	2	He	0.290	30.2	420	11.7	0	ICSA Main CR1 Failed
Sb	121	2	He	0.403	7.0	1780	4.5	0	ICSA Main CR1 Failed
Se	78	2	He	0.060	227.5	83	10.9	0	ICSA Main CR1 Failed
Ti	47	2	He	2178.931	1.9	468492	1.6	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1072556	2.48	1108445	96.76	70	120	
In	115	1	nogas	1105460	0.97	1193955	92.59	70	120	
Li	6	1	nogas	1008754	0.71	1052078	95.88	70	120	
Bi	209	1	nogas	1001686	3.27	1107740	90.43	70	120	
Ge	72	2	He	410197	0.27	423647	96.83	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	029ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T11:13:27-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	014CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	98.491	0.654	506128	1.93	100	98.5	80	120	
B	11	1	nogas	490.502	1.504	1508978	2.92	100	490.5	80	120	
Al	27	1	nogas	83609.177	3.573	1154487236	0.78	100	83609.2	80	120	ICSB Main CR1 Failed
Ti	47	1	nogas	2310.722	0.298	2183139	4.18	100	2310.7	80	120	
Ni	60	1	nogas	98.869	0.851	254408	3.67	100	98.9	80	120	
Cu	63	1	nogas	97.574	1.051	615315	5.15	100	97.6	80	120	
Zn	66	1	nogas	102.733	1.541	181865	5.24	100	102.7	80	120	
Se	77	1	nogas	136.715	4.294	14034	5.09	100	136.7	80	120	
Se	82	1	nogas	106.485	1.060	10671	3.19	100	106.5	80	120	
Sr	88	1	nogas	112.400	0.634	1492407	3.17	100	112.4	80	120	
Mo	95	1	nogas	2423.262	1.740	7153454	0.93	100	2423.3	80	120	ICSB Main CR1 Failed
Ag	107	1	nogas	99.504	1.647	685404	4.11	100	99.5	80	120	
Cd	111	1	nogas	104.301	1.733	151866	3.92	100	104.3	80	120	
Sn	118	1	nogas	105.295	2.135	444386	4.49	100	105.3	80	120	
Sb	121	1	nogas	104.983	0.327	622667	3.94	100	105.0	80	120	
Ba	137	1	nogas	105.499	1.432	211129	4.01	100	105.5	80	120	
Tl	205	1	nogas	103.544	4.265	1281374	4.70	100	103.5	80	120	
Pb	208	1	nogas	103.757	4.963	1757524	5.41	100	103.8	80	120	
U	238	1	nogas	98.529	4.893	2097458	5.26	100	98.5	80	120	
Na	23	2	He	116212.422	2.866	210123644	0.40	100	116212.4	80	120	ICSB Main CR1 Failed
Mg	24	2	He	115649.052	2.572	121404318	0.62	100	115649.1	80	120	ICSB Main CR1 Failed
Al	27	2	He	58763.281	2.236	75949597	0.48	100	58763.3	80	120	ICSB Main CR1 Failed
K	39	2	He	114481.212	2.372	130773408	0.75	100	114481.2	80	120	ICSB Main CR1 Failed
Ca	43	2	He	110708.268	2.093	316370	0.90	100	110708.3	80	120	
Ca	44	2	He	122577.183	0.670	5800288	2.05	100	122577.2	80	120	ICSB Main CR1 Failed
V	51	2	He	102.114	2.253	475726	0.59	100	102.1	80	120	
Cr	52	2	He	102.146	2.316	502056	0.53	100	102.1	80	120	
Mn	55	2	He	103.350	2.003	436826	0.81	100	103.3	80	120	
Fe	56	2	He	114545.238	1.565	566267405	1.14	100	114545.2	80	120	ICSB Main CR1 Failed
Co	59	2	He	100.372	3.033	580291	0.78	100	100.4	80	120	
Ni	60	2	He	97.927	1.941	135231	1.69	100	97.9	80	120	
Cu	63	2	He	97.084	2.382	339527	0.70	100	97.1	80	120	
Zn	66	2	He	103.408	1.747	84132	1.24	100	103.4	80	120	
As	75	2	He	108.471	2.115	66937	0.59	100	108.5	80	120	
Sb	121	2	He	104.837	1.730	326933	1.24	100	104.8	80	120	
Se	78	2	He	106.513	0.594	7753	2.51	100	106.5	80	120	
Ti	47	2	He	2228.773	1.818	520353	1.36	100	2228.8	80	120	ICSB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1167885	4.16	1108445	105.36	70	120	
In	115	1	nogas	1191841	2.63	1193955	99.82	70	120	
Li	6	1	nogas	1023354	1.50	1052078	97.27	70	120	
Bi	209	1	nogas	1090120	1.29	1107740	98.41	70	120	
Ge	72	2	He	445533	2.70	423647	105.17	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	267CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:40:48-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	32	28.79
B	11	1	nogas	18930	0.00
Al	27	1	nogas	34089	0.06
P	31	1	nogas	21382	0.01
Ti	47	1	nogas	163	15.15
Ni	60	1	nogas	317	9.43
Cu	63	1	nogas	2380	0.29
Zn	66	1	nogas	890	0.76
Se	77	1	nogas	4871	0.08
Se	82	1	nogas	103	32.89
Sr	88	1	nogas	410	1.03
Mo	95	1	nogas	247	5.77
Ag	107	1	nogas	127	9.52
Sn	118	1	nogas	1160	0.83
Sb	121	1	nogas	943	1.44
Ba	137	1	nogas	60	111.11
Tl	205	1	nogas	97	58.94
Pb	208	1	nogas	1010	0.64
Li	7	1	nogas	72236	0.00
Na	23	2	He	43990	0.00
Mg	24	2	He	667	1.60
Al	27	2	He	1877	0.62
K	39	2	He	111021	0.00
Ca	43	2	He	33	137.48
Ca	44	2	He	800	0.31
V	51	2	He	6395	0.05
Cr	52	2	He	11521	0.04
Mn	55	2	He	453	0.28
Fe	56	2	He	19283	0.01
Co	59	2	He	17	415.69
Ni	60	2	He	150	16.02
Cu	63	2	He	1317	0.09
Zn	66	2	He	400	0.62
As	75	2	He	282	5.27
Sb	121	2	He	523	4.02
Se	78	2	He	130	3.13

QC ISTD Table

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Ge	72	1	nogas	1242233	0.85
In	115	1	nogas	1329984	1.06
Li	6	1	nogas	1019193	0.45

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	nogas	1120972	4.64
Ge	72	2	He	464162	1.05

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	268CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:42:51-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	9705	0.01
B	11	1	nogas	46578	0.00
Al	27	1	nogas	54747	0.00
P	31	1	nogas	22083	0.02
Ti	47	1	nogas	2324	0.33
Ni	60	1	nogas	6258	0.04
Cu	63	1	nogas	15648	0.01
Zn	66	1	nogas	5174	0.06
Se	77	1	nogas	5108	0.06
Se	82	1	nogas	400	4.10
Sr	88	1	nogas	34544	0.00
Mo	95	1	nogas	7515	0.01
Ag	107	1	nogas	17331	0.02
Cd	111	1	nogas	3417	0.23
Sn	118	1	nogas	11405	0.02
Sb	121	1	nogas	13240	0.02
Ba	137	1	nogas	5084	0.11
Tl	205	1	nogas	28139	0.01
Pb	208	1	nogas	39687	0.01
Na	23	2	He	408418	0.00
Mg	24	2	He	210275	0.00
Al	27	2	He	3544	0.21
K	39	2	He	350613	0.00
Ca	43	2	He	687	1.05
Ca	44	2	He	11495	0.01
V	51	2	He	17106	0.01
Cr	52	2	He	23442	0.00
Mn	55	2	He	10170	0.03
Fe	56	2	He	1045832	0.00
Co	59	2	He	12992	0.02
Ni	60	2	He	3447	0.03
Cu	63	2	He	8596	0.03
Zn	66	2	He	2180	0.37
As	75	2	He	1707	0.13
Sb	121	2	He	6992	0.06
Se	78	2	He	297	2.37

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1245996	1.21	1242233	100.30	70	120	
In	115	1	nogas	1332076	0.94	1329984	100.16	70	120	
Li	6	1	nogas	1016036	0.25	1019193	99.69	70	120	
Bi	209	1	nogas	1135220	3.20	1120972	101.27	70	120	
Ge	72	2	He	466914	0.62	464162	100.59	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	269CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:44:54-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	23888	0.01
B	11	1	nogas	88128	0.00
Al	27	1	nogas	89700	0.00
P	31	1	nogas	23589	0.00
Ti	47	1	nogas	5691	0.05
Ni	60	1	nogas	15685	0.01
Cu	63	1	nogas	36906	0.00
Zn	66	1	nogas	11214	0.04
Se	77	1	nogas	5288	0.06
Se	82	1	nogas	753	0.67
Sr	88	1	nogas	86238	0.00
Mo	95	1	nogas	17928	0.02
Ag	107	1	nogas	42506	0.01
Cd	111	1	nogas	8743	0.03
Sn	118	1	nogas	26735	0.00
Sb	121	1	nogas	32096	0.00
Ba	137	1	nogas	12275	0.03
Tl	205	1	nogas	70197	0.01
Pb	208	1	nogas	97474	0.00
Na	23	2	He	942211	0.00
Mg	24	2	He	517289	0.00
Al	27	2	He	5381	0.04
K	39	2	He	701825	0.00
Ca	43	2	He	1687	0.25
Ca	44	2	He	27766	0.00
V	51	2	He	31741	0.01
Cr	52	2	He	38315	0.01
Mn	55	2	He	24383	0.01
Fe	56	2	He	2535024	0.00
Co	59	2	He	32973	0.01
Ni	60	2	He	8039	0.02
Cu	63	2	He	20000	0.02
Zn	66	2	He	4868	0.01
As	75	2	He	3759	0.04
Sb	121	2	He	16827	0.01
Se	78	2	He	534	0.69

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1246872	1.20	1242233	100.37	70	120	
In	115	1	nogas	1342284	0.20	1329984	100.92	70	120	
Li	6	1	nogas	1016955	0.86	1019193	99.78	70	120	
Bi	209	1	nogas	1151572	4.34	1120972	102.73	70	120	
Ge	72	2	He	469462	0.51	464162	101.14	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/1000
Data File Name	270CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:46:58-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	47856	0.00
B	11	1	nogas	160235	0.00
Al	27	1	nogas	151987	0.00
P	31	1	nogas	26882	0.01
Ti	47	1	nogas	11294	0.03
Ni	60	1	nogas	30745	0.01
Cu	63	1	nogas	74243	0.00
Zn	66	1	nogas	21372	0.01
Se	77	1	nogas	5531	0.10
Se	82	1	nogas	1377	0.22
Sr	88	1	nogas	171019	0.00
Mo	95	1	nogas	36509	0.00
Ag	107	1	nogas	84504	0.00
Cd	111	1	nogas	18108	0.01
Sn	118	1	nogas	52740	0.01
Sb	121	1	nogas	65756	0.00
Ba	137	1	nogas	25132	0.01
Tl	205	1	nogas	141798	0.00
Pb	208	1	nogas	194141	0.00
Na	23	2	He	1856720	0.00
Mg	24	2	He	1039198	0.00
Al	27	2	He	9963	0.03
K	39	2	He	1295595	0.00
Ca	43	2	He	3330	0.13
Ca	44	2	He	54990	0.00
V	51	2	He	57789	0.00
Cr	52	2	He	66630	0.00
Mn	55	2	He	48742	0.01
Fe	56	2	He	6139401	0.00
Co	59	2	He	64080	0.00
Ni	60	2	He	15518	0.02
Cu	63	2	He	39369	0.00
Zn	66	2	He	9303	0.05
As	75	2	He	7294	0.02
Sb	121	2	He	33118	0.01
Se	78	2	He	945	0.49

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1256449	1.23	1242233	101.14	70	120	
In	115	1	nogas	1360698	0.84	1329984	102.31	70	120	
Li	6	1	nogas	1015407	1.30	1019193	99.63	70	120	
Bi	209	1	nogas	1156951	2.70	1120972	103.21	70	120	
Ge	72	2	He	478144	0.62	464162	103.01	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	271CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:49:02-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	484891	0.00
B	11	1	nogas	1453898	0.00
Al	27	1	nogas	1247284	0.00
P	31	1	nogas	60346	0.00
Ti	47	1	nogas	114781	0.00
Ni	60	1	nogas	307139	0.00
Cu	63	1	nogas	721250	0.00
Zn	66	1	nogas	208167	0.00
Se	77	1	nogas	12916	0.02
Se	82	1	nogas	12232	0.05
Sr	88	1	nogas	1762015	0.00
Mo	95	1	nogas	375463	0.00
Ag	107	1	nogas	871929	0.00
Cd	111	1	nogas	184266	0.00
Sn	118	1	nogas	538984	0.00
Sb	121	1	nogas	677207	0.00
Ba	137	1	nogas	258693	0.00
Tl	205	1	nogas	1479888	0.00
Pb	208	1	nogas	2031822	0.00
Na	23	2	He	19815026	0.00
Mg	24	2	He	11541071	0.00
Al	27	2	He	79288	0.00
K	39	2	He	13731373	0.00
Ca	43	2	He	32288	0.00
Ca	44	2	He	543091	0.00
V	51	2	He	538471	0.00
Cr	52	2	He	559862	0.00
Mn	55	2	He	486584	0.00
Fe	56	2	He	59318889	0.00
Co	59	2	He	658258	0.00
Ni	60	2	He	158044	0.00
Cu	63	2	He	383214	0.00
Zn	66	2	He	91854	0.00
As	75	2	He	71177	0.00
Sb	121	2	He	347852	0.00
Se	78	2	He	8505	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1304024	3.21	1242233	104.97	70	120	
In	115	1	nogas	1390341	2.89	1329984	104.54	70	120	
Li	6	1	nogas	976552	1.28	1019193	95.82	70	120	
Bi	209	1	nogas	1203048	0.94	1120972	107.32	70	120	
Ge	72	2	He	482117	1.24	464162	103.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	272CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:51:05-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	nogas	950659	0.00
B	11	1	nogas	2851901	0.00
Al	27	1	nogas	2337278	0.00
P	31	1	nogas	92850	0.00
Ti	47	1	nogas	222668	0.00
Ni	60	1	nogas	599566	0.00
Cu	63	1	nogas	1409707	0.00
Zn	66	1	nogas	406636	0.00
Se	77	1	nogas	22157	0.01
Se	82	1	nogas	23609	0.01
Sr	88	1	nogas	3975640	0.00
Mo	95	1	nogas	750006	0.00
Ag	107	1	nogas	1720688	0.00
Cd	111	1	nogas	359976	0.00
Sn	118	1	nogas	1087309	0.00
Sb	121	1	nogas	1429431	0.00
Ba	137	1	nogas	514525	0.00
Tl	205	1	nogas	3194327	0.00
Pb	208	1	nogas	4085190	0.00
Na	23	2	He	38875997	0.00
Mg	24	2	He	22486236	0.00
Al	27	2	He	149201	0.00
K	39	2	He	26563005	0.00
Ca	43	2	He	64681	0.00
Ca	44	2	He	1059035	0.00
V	51	2	He	1051733	0.00
Cr	52	2	He	1084604	0.00
Mn	55	2	He	955225	0.00
Fe	56	2	He	114857452	0.00
Co	59	2	He	1293479	0.00
Ni	60	2	He	306970	0.00
Cu	63	2	He	745485	0.00
Zn	66	2	He	178127	0.00
As	75	2	He	139031	0.00
Sb	121	2	He	711022	0.00
Se	78	2	He	16347	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag

Calibration Standard Report

Ge	72	1	nogas	1298265	3.83	1242233	104.51	70	120	
In	115	1	nogas	1395713	2.44	1329984	104.94	70	120	
Li	6	1	nogas	926974	1.94	1019193	90.95	70	120	
Bi	209	1	nogas	1209451	1.22	1120972	107.89	70	120	
Ge	72	2	He	482303	0.31	464162	103.91	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICCV2
Data File Name	275LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:57:14-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	2.037	2.543	10467	2.64	2	101.8	70	120	
B	11	1	nogas	20.942	5.275	82588	4.16	10	209.4	70	120	NewName Main CR1 Failed
Al	27	1	nogas	1.996	7.856	56825	2.90	2	99.8	70	120	
P	31	1	nogas	49.172	9.875	24977	1.30	10	491.7	70	120	NewName Main CR1 Failed
Ti	47	1	nogas	2.319	1.800	2670	1.50	2	116.0	70	120	
Ni	60	1	nogas	2.162	5.855	6602	5.46	2	108.1	70	120	
Cu	63	1	nogas	2.225	5.299	17577	4.23	2	111.3	70	120	
Zn	66	1	nogas	2.134	3.011	5094	2.79	2	106.7	70	120	
Se	77	1	nogas	-24.052	-6.430	2970	4.42	2	-1202.6	70	120	NewName Main CR1 Failed
Se	82	1	nogas	3.089	9.216	457	7.04	2	154.4	70	120	NewName Main CR1 Failed
Sr	88	1	nogas	1.927	0.780	36793	0.08	2	96.4	70	120	
Mo	95	1	nogas	2.485	1.422	9306	2.20	2	124.3	70	120	NewName Main CR1 Failed
Ag	107	1	nogas	2.157	2.936	18208	2.92	2	107.9	70	120	
Cd	111	1	nogas	2.015	4.120	3540	3.33	2	100.8	70	120	
Sn	118	1	nogas	2.883	1.079	16360	1.84	2	144.1	70	120	NewName Main CR1 Failed
Sb	121	1	nogas	3.008	1.072	21456	1.30	2	150.4	70	120	NewName Main CR1 Failed
Ba	137	1	nogas	2.095	6.743	5301	6.08	2	104.8	70	120	
Tl	205	1	nogas	2.135	4.159	32349	1.82	2	106.7	70	120	
Pb	208	1	nogas	2.143	5.313	42967	1.02	2	107.1	70	120	
Pb	206	1	nogas	2.176	3.657	10978	1.73	2	108.8	70	120	
Pb	207	1	nogas	2.127	2.118	9340	3.39	2	106.4	70	120	
U	238	1	nogas	1.883	5.902	48181	0.70	2	94.1	70	120	
Li	7	1	nogas	2.127	4.085	108698	1.29	2	106.4	70	120	
Ba	135	1	nogas	2.167	4.554	3120	3.94	2	108.4	70	120	
Tl	203	1	nogas	2.262	5.981	13647	2.07	2	113.1	70	120	
Na	23	2	He	200.281	0.995	423487	0.37	200	100.1	70	120	
Mg	24	2	He	196.561	1.307	216464	1.52	200	98.3	70	120	
Al	27	2	He	2.534	12.972	3727	6.71	2	126.7	70	120	NewName Main CR1 Failed
K	39	2	He	193.531	0.501	362127	0.59	200	96.8	70	120	
Ca	43	2	He	198.603	19.507	657	18.17	200	99.3	70	120	
Ca	44	2	He	207.482	7.550	11528	7.20	200	103.7	70	120	
V	51	2	He	1.567	4.765	14440	2.87	2	78.4	70	120	
Cr	52	2	He	2.172	3.996	22994	1.38	2	108.6	70	120	
Mn	55	2	He	2.095	5.531	10210	5.28	2	104.8	70	120	
Fe	56	2	He	192.199	0.754	1098804	1.38	200	96.1	70	120	
Co	59	2	He	2.142	2.104	13526	2.76	2	107.1	70	120	
Ni	60	2	He	2.245	2.081	3517	2.42	2	112.2	70	120	
Cu	63	2	He	2.053	0.706	8789	0.37	2	102.6	70	120	
Zn	66	2	He	2.145	9.119	2267	8.16	2	107.2	70	120	
As	75	2	He	2.209	2.603	1780	1.81	2	110.4	70	120	
Se	77	2	He	3.274	71.718	143	39.67	2	163.7	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.967	6.398	10721	6.33	2	148.3	70	120	NewName Main CR1 Failed
Se	78	2	He	2.963	14.358	366	9.00	2	148.1	70	120	NewName Main CR1 Failed
Ti	47	2	He	2.291	5.666	593	5.42	2	114.5	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1253732	0.35	1242233	100.93	70	120	
In	115	1	nogas	1355205	0.85	1329984	101.90	70	120	
Li	6	1	nogas	1005866	0.11	1019193	98.69	70	120	
Bi	209	1	nogas	1160975	5.39	1120972	103.57	70	120	
Ge	72	2	He	468531	0.67	464162	100.94	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICCV5
Data File Name	276LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T21:59:45-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.607	2.230	23858	1.92	5	92.1	70	130	
B	11	1	nogas	28.305	2.452	106042	1.42	25	113.2	70	130	
Al	27	1	nogas	5.265	4.133	92573	3.10	5	105.3	70	130	
P	31	1	nogas	58.507	18.481	25361	3.36	25	234.0	70	130	NewName Main CR1 Failed
Ti	47	1	nogas	5.137	7.519	5654	6.95	5	102.7	70	130	
Ni	60	1	nogas	5.311	2.732	15585	2.16	5	106.2	70	130	
Cu	63	1	nogas	5.201	1.320	37491	1.84	5	104.0	70	130	
Zn	66	1	nogas	5.242	3.642	11091	3.75	5	104.8	70	130	
Se	77	1	nogas	-20.587	-4.307	3217	1.79	5	-411.7	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.665	19.437	743	17.14	5	113.3	70	130	
Sr	88	1	nogas	4.571	3.700	86302	2.71	5	91.4	70	130	
Mo	95	1	nogas	5.035	4.217	18512	3.27	5	100.7	70	130	
Ag	107	1	nogas	5.082	2.954	42529	2.04	5	101.6	70	130	
Cd	111	1	nogas	4.919	1.559	8606	0.59	5	98.4	70	130	
Sn	118	1	nogas	5.277	3.780	28839	2.85	5	105.5	70	130	
Sb	121	1	nogas	5.352	2.842	37041	2.86	5	107.0	70	130	
Ba	137	1	nogas	4.841	6.165	12115	5.33	5	96.8	70	130	
Tl	205	1	nogas	4.710	9.992	71795	3.17	5	94.2	70	130	
Pb	208	1	nogas	4.893	9.023	97604	2.22	5	97.9	70	130	
U	238	1	nogas	4.130	9.006	106589	2.38	5	82.6	70	130	
Li	7	1	nogas	4.806	2.066	157272	0.77	5	96.1	70	130	
Na	23	2	He	474.238	0.963	944097	0.17	500	94.8	70	130	
Mg	24	2	He	468.828	1.115	516490	0.98	500	93.8	70	130	
Al	27	2	He	4.958	1.798	5491	1.74	5	99.2	70	130	
K	39	2	He	455.731	1.241	702422	0.33	500	91.1	70	130	
Ca	43	2	He	460.870	6.132	1483	5.89	500	92.2	70	130	
Ca	44	2	He	517.056	0.695	27582	1.31	500	103.4	70	130	
V	51	2	He	4.617	0.753	30042	1.42	5	92.3	70	130	
Cr	52	2	He	5.199	4.957	38920	3.45	5	104.0	70	130	
Mn	55	2	He	5.082	3.974	24166	3.46	5	101.6	70	130	
Fe	56	2	He	453.777	0.742	2573306	0.72	500	90.8	70	130	
Co	59	2	He	5.108	1.996	32295	1.94	5	102.2	70	130	
Ni	60	2	He	5.251	2.143	8042	2.32	5	105.0	70	130	
Cu	63	2	He	5.111	3.515	19947	3.49	5	102.2	70	130	
Zn	66	2	He	5.148	1.411	4884	1.39	5	103.0	70	130	
As	75	2	He	5.136	2.704	3769	1.90	5	102.7	70	130	
Sb	121	2	He	5.263	4.624	18646	3.65	5	105.3	70	130	
Se	78	2	He	5.139	10.903	540	8.99	5	102.8	70	130	
Ti	47	2	He	4.884	5.105	1257	5.59	5	97.7	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1240836	0.65	1242233	99.89	70	120	
In	115	1	nogas	1349508	0.99	1329984	101.47	70	120	
Li	6	1	nogas	1015414	0.60	1019193	99.63	70	120	
Bi	209	1	nogas	1173745	7.11	1120972	104.71	70	120	
Ge	72	2	He	469572	0.95	464162	101.17	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	277_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:01:49-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	97.729	1.395	485310	1.60	100	97.7	90	110	
B	11	1	nogas	492.682	1.435	1475023	1.64	500	98.5	90	110	
Al	27	1	nogas	104.306	0.289	1247987	2.25	100	104.3	90	110	
P	31	1	nogas	564.773	2.010	62772	1.36	500	113.0	90	110	ICV Main CR1 Failed
Ti	47	1	nogas	103.082	0.533	115484	2.05	100	103.1	90	110	
Ni	60	1	nogas	101.304	0.193	305112	2.23	100	101.3	90	110	
Cu	63	1	nogas	101.853	0.502	721898	2.13	100	101.9	90	110	
Zn	66	1	nogas	100.724	0.784	206059	3.20	100	100.7	90	110	
Se	77	1	nogas	87.215	3.829	12399	0.20	100	87.2	90	110	ICV Main CR1 Failed
Se	82	1	nogas	96.478	2.407	11511	3.01	100	96.5	90	110	
Sr	88	1	nogas	91.314	1.392	1766543	2.49	100	91.3	90	110	
Mo	95	1	nogas	101.096	2.012	377674	2.68	100	101.1	90	110	
Ag	107	1	nogas	101.903	2.074	875278	3.00	100	101.9	90	110	
Cd	111	1	nogas	100.679	2.124	181292	3.51	100	100.7	90	110	
Sn	118	1	nogas	100.110	2.205	541353	3.44	100	100.1	90	110	
Sb	121	1	nogas	96.041	1.043	678931	3.36	100	96.0	90	110	
Ba	137	1	nogas	100.676	2.018	258182	3.50	100	100.7	90	110	
Tl	205	1	nogas	95.854	4.909	1482213	4.01	100	95.9	90	110	
Pb	208	1	nogas	101.075	5.437	2025890	4.46	100	101.1	90	110	
U	238	1	nogas	85.610	5.074	2242354	4.18	100	85.6	90	110	ICV Main CR1 Failed
Li	7	1	nogas	97.956	1.188	1738240	1.36	100	98.0	90	110	
Ba	135	1	nogas	101.522	2.928	148523	3.82	100	101.5	90	110	
Tl	203	1	nogas	101.381	5.327	625237	4.32	100	101.4	90	110	
Na	23	2	He	10510.184	0.632	20222845	0.03	10000	105.1	90	110	
Mg	24	2	He	10367.242	0.801	11545028	1.32	10000	103.7	90	110	
Al	27	2	He	104.210	1.226	78302	0.86	100	104.2	90	110	
K	39	2	He	10318.934	0.352	13637113	0.95	10000	103.2	90	110	
Ca	43	2	He	10157.121	4.048	32368	3.43	10000	101.6	90	110	
Ca	44	2	He	10173.519	0.739	533945	1.32	10000	101.7	90	110	
V	51	2	He	102.694	0.962	537188	0.61	100	102.7	90	110	
Cr	52	2	He	102.647	0.721	556650	0.52	100	102.6	90	110	
Mn	55	2	He	102.024	1.262	482146	0.66	100	102.0	90	110	
Fe	56	2	He	10335.090	1.801	58882379	1.26	10000	103.4	90	110	
Co	59	2	He	102.854	1.111	657832	0.72	100	102.9	90	110	
Ni	60	2	He	101.774	0.356	154908	0.27	100	101.8	90	110	
Cu	63	2	He	102.892	1.135	380572	0.60	100	102.9	90	110	
Zn	66	2	He	102.275	2.108	90482	1.97	100	102.3	90	110	
As	75	2	He	102.340	1.101	70553	1.03	100	102.3	90	110	
Sb	121	2	He	100.217	0.735	349716	0.66	100	100.2	90	110	
Se	78	2	He	102.481	2.616	8372	1.99	100	102.5	90	110	
Ti	47	2	He	102.972	1.619	26607	1.60	100	103.0	90	110	

QC ISTD Table

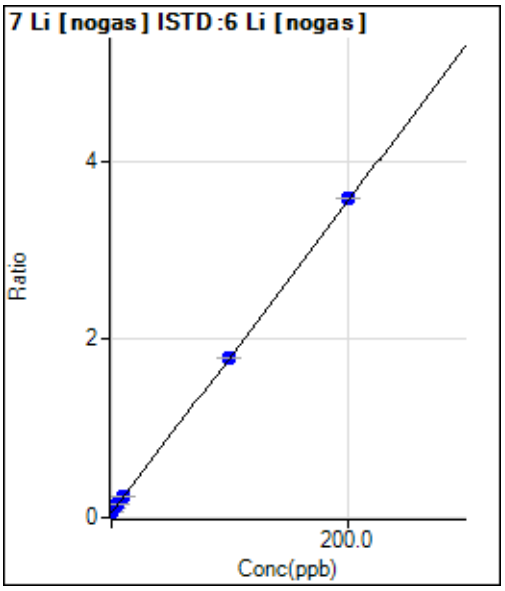
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1298319	2.42	1242233	104.51	70	120	
In	115	1	nogas	1388697	2.05	1329984	104.41	70	120	
Li	6	1	nogas	974750	0.23	1019193	95.64	70	120	
Bi	209	1	nogas	1187052	1.36	1120972	105.89	70	120	
Ge	72	2	He	475225	0.60	464162	102.38	70	120	

Calibration for 277_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080423A.b\
Analysis File: 080423A.batch.bin
DA Date-Time: 8/4/2023 10:02:54 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	267CALB.d	CAL BLK	8/4/2023 9:40:48 PM
2	268CALS.d	2/10/200	8/4/2023 9:42:51 PM
3	269CALS.d	5/25/500	8/4/2023 9:44:54 PM
4	270CALS.d	10/50/1000	8/4/2023 9:46:58 PM
5	271CALS.d	100/500/10K	8/4/2023 9:49:02 PM
6	272CALS.d	200/1000/20K	8/4/2023 9:51:05 PM
7			

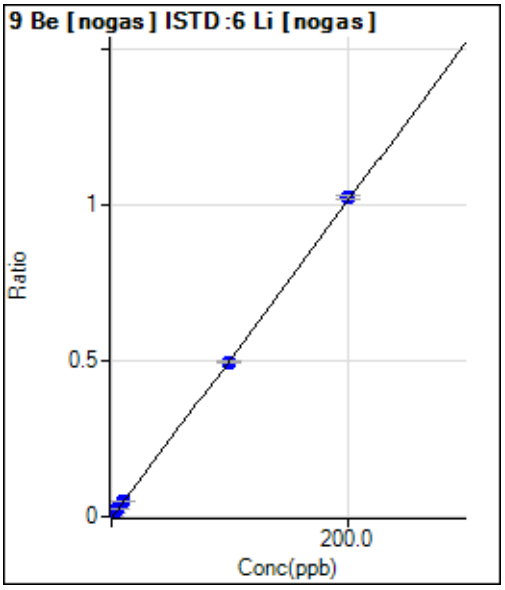
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	72235.98	0.0709	P	1.4	
2	☐	2.000	1.919	106105.85	0.1044	P	0.9	-4.0
3	☐	5.000	4.642	154599.31	0.1520	P	0.6	-7.2
4	☐	10.000	9.363	238160.22	0.2346	P	0.3	-6.4
5	☐	100.000	98.271	1746894.61	1.7887	P	0.6	-1.7
6	☐	200.000	200.906	3321127.45	3.5829	P	0.5	0.5
7	☐	1.000						

y = 0.0175 * x + 0.0709
R = 0.9999
DL = 0.1646 ppb
BEC = 4.055 ppb

Weight: <None>
Min Conc: <None>

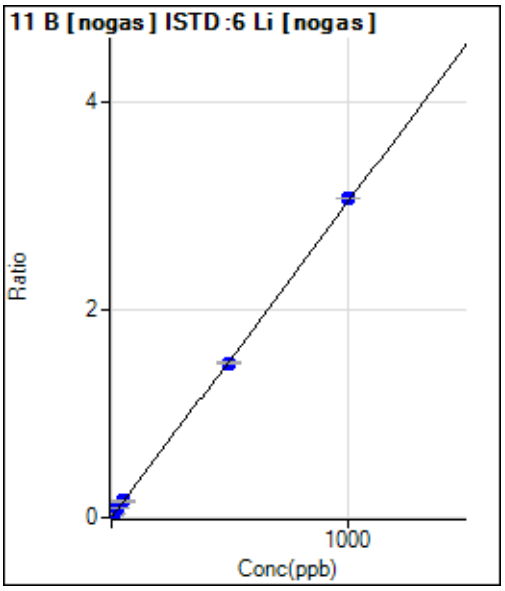


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	31.67	0.0000	P	8.8	
2	☐	2.000	1.869	9704.77	0.0096	P	1.1	-6.6
3	☐	5.000	4.606	23888.41	0.0235	P	1.8	-7.9
4	☐	10.000	9.246	47856.46	0.0471	P	0.8	-7.5
5	☐	100.000	97.462	484890.70	0.4965	P	0.9	-2.5
6	☐	200.000	201.318	950659.07	1.0256	P	0.6	0.7
7	☐	1.000						

y = 0.0051 * x + 3.1065E-005
R = 0.9999
DL = 0.00161 ppb
BEC = 0.006098 ppb

Weight: <None>
Min Conc: <None>

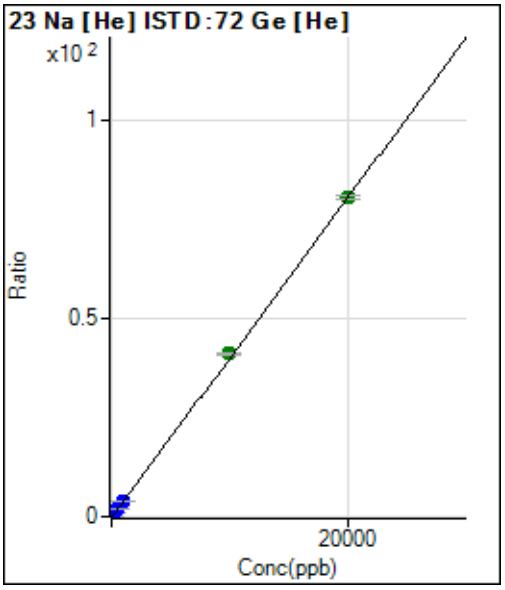
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18929.94	0.0186	P	1.3	
2	☐	10.000	8.988	46577.79	0.0458	P	1.2	-10.1
3	☐	25.000	22.445	88127.75	0.0867	P	1.4	-10.2
4	☐	50.000	45.899	160234.73	0.1578	P	1.0	-8.2
5	☐	500.000	484.585	1453897.95	1.4886	P	1.6	-3.1
6	☐	1000.000	1007.986	2851901.42	3.0765	P	0.5	0.8
7	☐	5.000						

y = 0.0030 * x + 0.0186
R = 0.9998
DL = 0.2406 ppb
BEC = 6.123 ppb

Weight: <None>
Min Conc: <None>

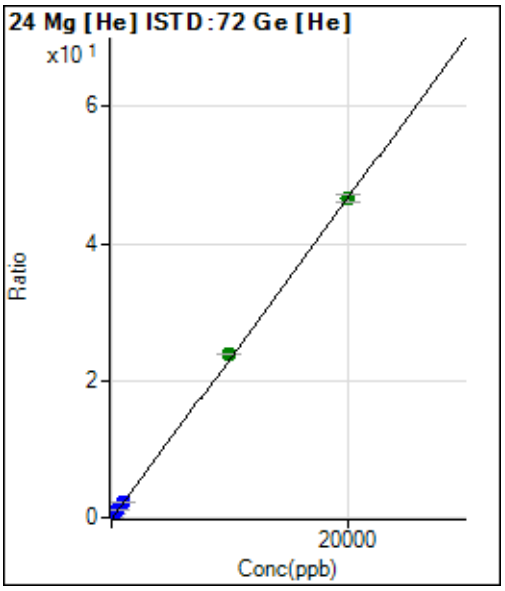


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43989.63	0.0948	P	1.3	
2	☐	200.000	193.057	408418.26	0.8747	P	0.6	-3.5
3	☐	500.000	473.326	942210.51	2.0070	P	0.4	-5.3
4	☐	1000.000	937.750	1856720.28	3.8832	P	0.3	-6.2
5	☐	10000.00	10151.19	19815026.37	41.1051	A	1.5	1.5
6	☐	20000.00	19928.24	38875996.92	80.6038	A	0.6	-0.4
7	☐	100.000						

y = 0.0040 * x + 0.0948
R = 1.0000
DL = 0.9354 ppb
BEC = 23.46 ppb

Weight: <None>
Min Conc: <None>

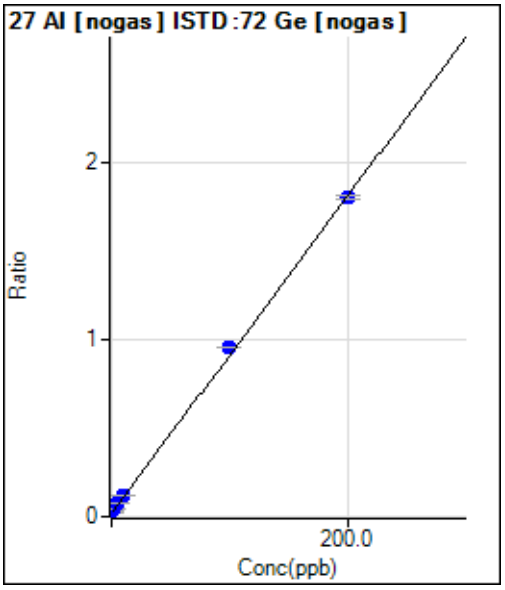
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	666.69	0.0014	P	9.7	
2	☐	200.000	191.582	210274.94	0.4503	P	0.7	-4.2
3	☐	500.000	469.657	517288.72	1.1019	P	0.7	-6.1
4	☐	1000.000	926.985	1039198.19	2.1735	P	0.9	-7.3
5	☐	10000.00	10216.08	11541071.50	23.9390	A	0.5	2.2
6	☐	20000.00	19896.45	22486236.33	46.6214	A	1.9	-0.5
7	☐	100.000						

y = 0.0023 * x + 0.0014
R = 0.9999
DL = 0.1787 ppb
BEC = 0.6126 ppb

Weight: <None>
Min Conc: <None>

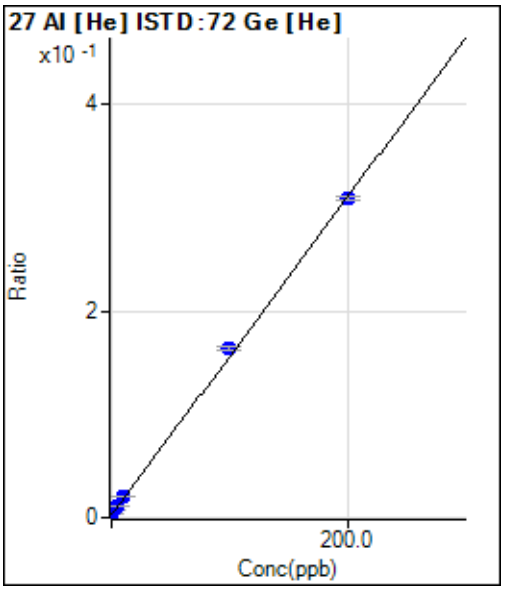


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	34089.35	0.0275	P	19.	
2	☐	2.000	1.840	54747.42	0.0439	P	1.2	-8.0
3	☐	5.000	4.969	89700.38	0.0719	P	1.2	-0.6
4	☐	10.000	10.446	151987.49	0.1210	P	1.6	4.5
5	☐	100.000	103.771	1247283.55	0.9565	P	0.2	3.8
6	☐	200.000	198.095	2337278.40	1.8009	P	1.5	-1.0
7	☐	1.000						

y = 0.0090 * x + 0.0275
R = 0.9997
DL = 1.809 ppb
BEC = 3.068 ppb

Weight: <None>
Min Conc: <None>

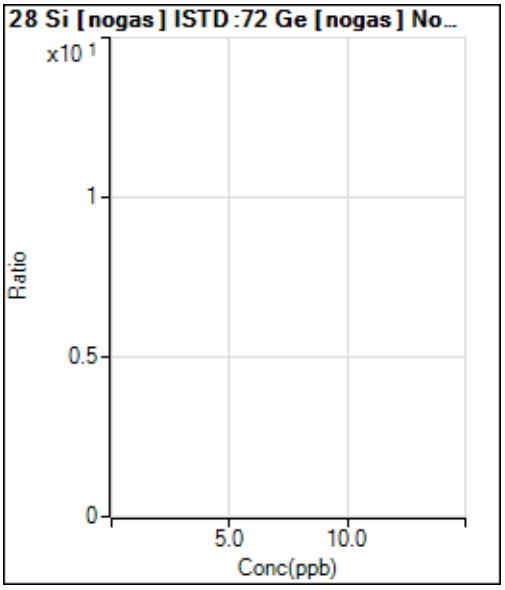
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1876.82	0.0040	P	12.	
2	☐	2.000	2.297	3543.80	0.0076	P	7.0	14.8
3	☐	5.000	4.808	5381.03	0.0115	P	1.8	-3.8
4	☐	10.000	10.886	9963.37	0.0208	P	2.1	8.9
5	☐	100.000	104.019	79287.91	0.1645	P	1.9	4.0
6	☐	200.000	197.948	149201.20	0.3094	P	1.0	-1.0
7	☐	1.000						

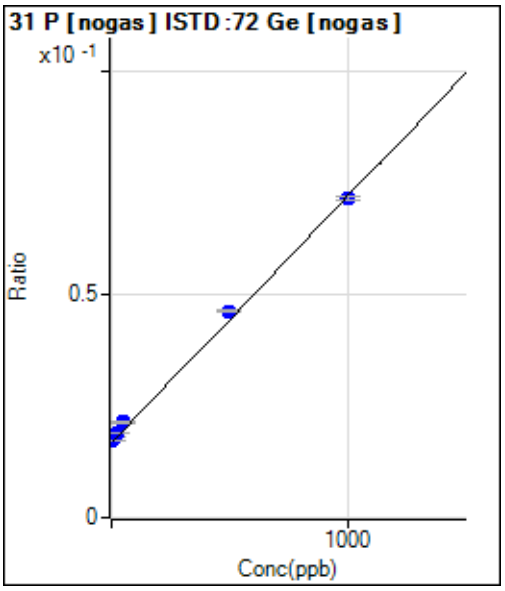
y = 0.0015 * x + 0.0040
R = 0.9997
DL = 0.9773 ppb
BEC = 2.623 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	100.000						
3	☐	250.000						
4	☐	500.000						
5	☐	5000.000						
6	☐	10000.00						
7	☐	50.000						

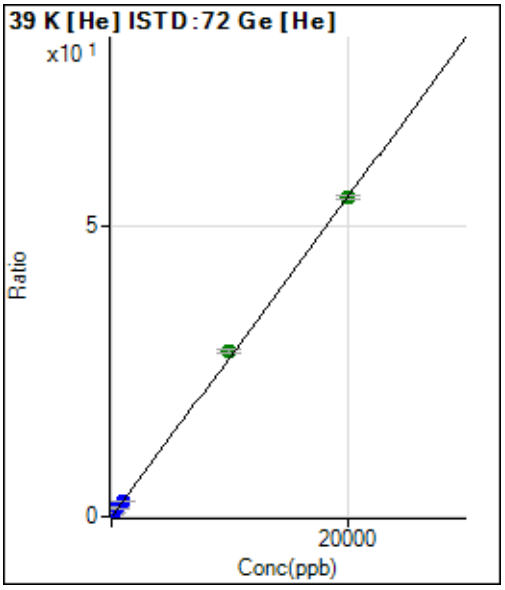
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21381.88	0.0172	P	2.0	
2	☐	10.000	9.396	22082.86	0.0177	P	4.8	-6.0
3	☐	25.000	31.006	23588.51	0.0189	P	1.6	24.0
4	☐	50.000	75.878	26882.01	0.0214	P	0.7	51.8
5	☐	500.000	527.136	60345.60	0.0463	P	0.6	5.4
6	☐	1000.000	984.994	92850.21	0.0715	P	0.9	-1.5
7	☐	5.000						

y = 5.5150E-005 * x + 0.0172
R = 0.9993
DL = 18.51 ppb
BEC = 312.1 ppb

Weight: <None>
Min Conc: <None>

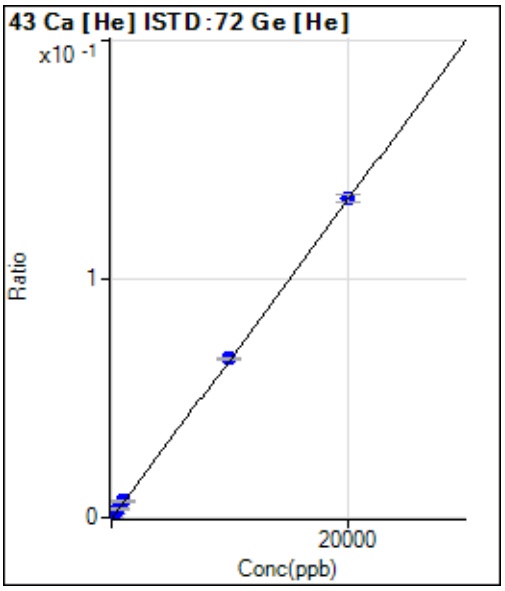


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	111020.85	0.2392	P	1.1	
2	☐	200.000	185.557	350613.16	0.7509	P	0.1	-7.2
3	☐	500.000	455.367	701825.12	1.4950	P	0.7	-8.9
4	☐	1000.000	895.879	1295594.95	2.7098	P	1.2	-10.4
5	☐	10000.00	10242.56	13731372.71	28.4851	A	1.8	2.4
6	☐	20000.00	19885.18	26563005.44	55.0766	A	1.2	-0.6
7	☐	100.000						

y = 0.0028 * x + 0.2392
R = 0.9999
DL = 2.878 ppb
BEC = 86.74 ppb

Weight: <None>
Min Conc: <None>

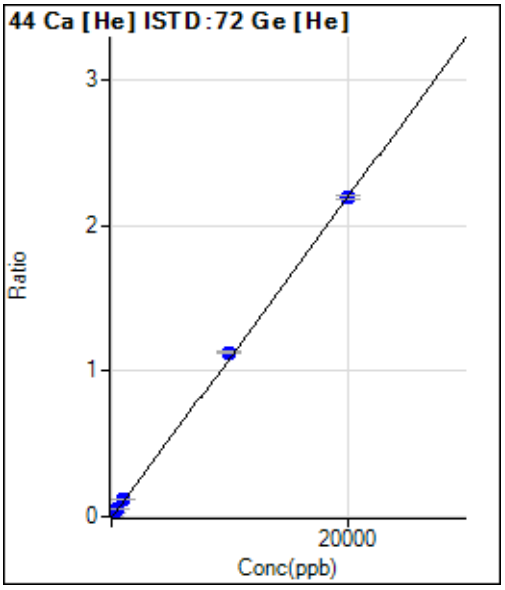
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	45.	
2	☐	200.000	208.819	686.69	0.0015	P	7.1	4.4
3	☐	500.000	525.573	1686.79	0.0036	P	4.1	5.1
4	☐	1000.000	1028.916	3330.43	0.0070	P	4.4	2.9
5	☐	10000.00	9985.817	32288.12	0.0670	P	1.1	-0.1
6	☐	20000.00	20004.91	64680.77	0.1341	P	2.6	0.0
7	☐	100.000						

y = 6.6998E-006 * x + 7.1641E-005
R = 1.0000
DL = 14.49 ppb
BEC = 10.69 ppb

Weight: <None>
Min Conc: <None>

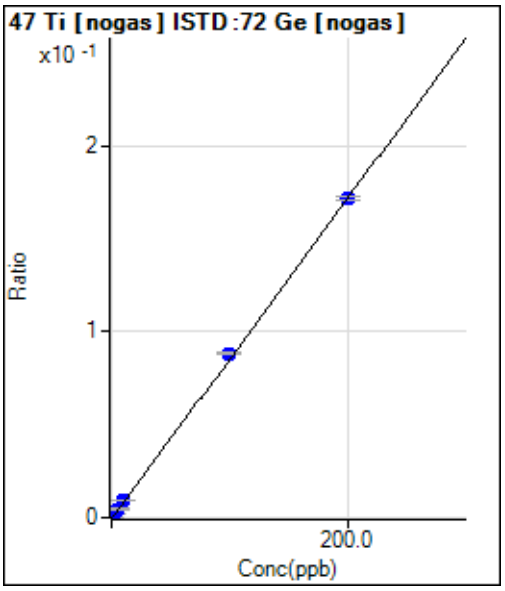


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0017	P	2.7	
2	☐	200.000	207.646	11494.56	0.0246	P	2.2	3.8
3	☐	500.000	520.751	27765.89	0.0591	P	0.8	4.2
4	☐	1000.000	1027.409	54989.62	0.1150	P	1.7	2.7
5	☐	10000.00	10201.25	543091.01	1.1266	P	1.3	2.0
6	☐	20000.00	19897.40	1059034.78	2.1958	P	0.8	-0.5
7	☐	100.000						

y = 1.1027E-004 * x + 0.0017
R = 0.9999
DL = 1.257 ppb
BEC = 15.63 ppb

Weight: <None>
Min Conc: <None>

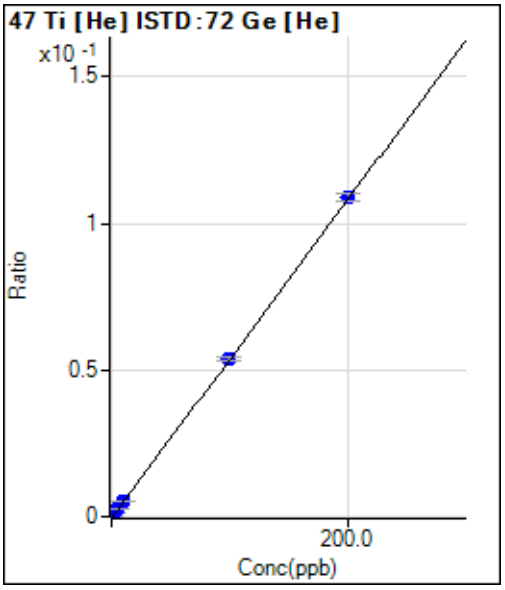
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	163.34	0.0001	P	24.	
2	☐	2.000	2.012	2323.55	0.0019	P	8.3	0.6
3	☐	5.000	5.146	5691.20	0.0046	P	3.8	2.9
4	☐	10.000	10.279	11294.37	0.0090	P	2.5	2.8
5	☐	100.000	102.011	114781.37	0.0880	P	1.3	2.0
6	☐	200.000	198.977	222668.00	0.1716	P	1.8	-0.5
7	☐	1.000						

y = 8.6167E-004 * x + 1.3151E-004
R = 0.9999
DL = 0.1142 ppb
BEC = 0.1526 ppb

Weight: <None>
Min Conc: <None>

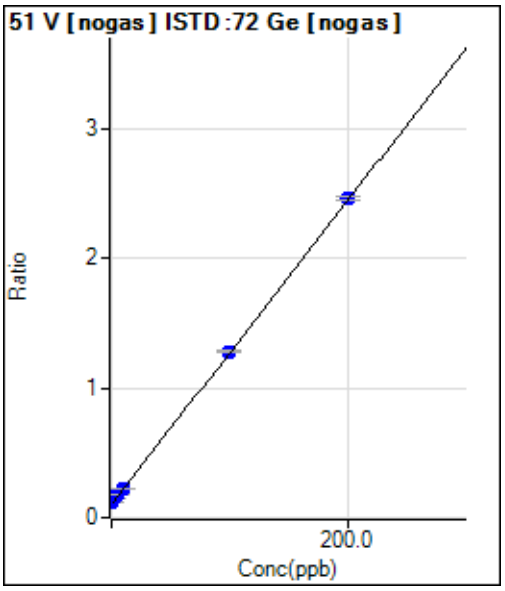


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	1.1	
2	☐	2.000	2.233	576.69	0.0012	P	29.	11.7
3	☐	5.000	5.173	1330.08	0.0028	P	0.9	3.5
4	☐	10.000	9.724	2536.92	0.0053	P	8.7	-2.8
5	☐	100.000	99.167	25992.60	0.0539	P	2.1	-0.8
6	☐	200.000	200.423	52548.16	0.1090	P	2.3	0.2
7	☐	1.000						

y = 5.4352E-004 * x + 2.1546E-005
R = 1.0000
DL = 0.001255 ppb
BEC = 0.03964 ppb

Weight: <None>
Min Conc: <None>

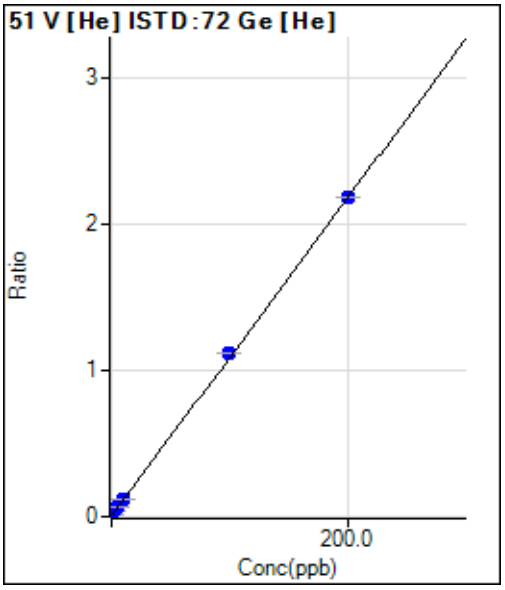
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	143612.65	0.1156	P	1.5	
2	☐	2.000	2.313	177857.83	0.1428	P	1.3	15.7
3	☐	5.000	4.940	216416.21	0.1736	P	1.3	-1.2
4	☐	10.000	9.419	284125.38	0.2262	P	1.1	-5.8
5	☐	100.000	99.348	1670690.65	1.2815	P	1.5	-0.7
6	☐	200.000	200.353	3201687.24	2.4669	P	1.2	0.2
7	☐	1.000						

y = 0.0117 * x + 0.1156
R = 1.0000
DL = 0.4533 ppb
BEC = 9.851 ppb

Weight: <None>
Min Conc: <None>

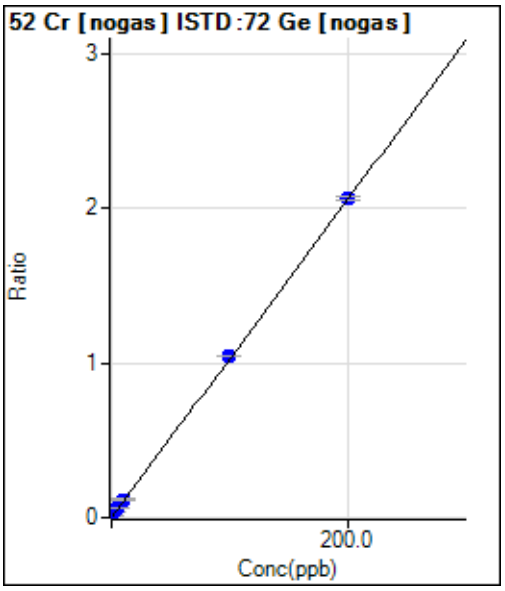


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6394.72	0.0138	P	3.0	
2	☐	2.000	2.102	17106.36	0.0366	P	0.8	5.1
3	☐	5.000	4.951	31740.93	0.0676	P	1.8	-1.0
4	☐	10.000	9.848	57788.56	0.1209	P	1.2	-1.5
5	☐	100.000	101.457	538470.81	1.1170	P	0.9	1.5
6	☐	200.000	199.279	1051733.47	2.1806	P	0.4	-0.4
7	☐	1.000						

y = 0.0109 * x + 0.0138
R = 1.0000
DL = 0.1155 ppb
BEC = 1.267 ppb

Weight: <None>
Min Conc: <None>

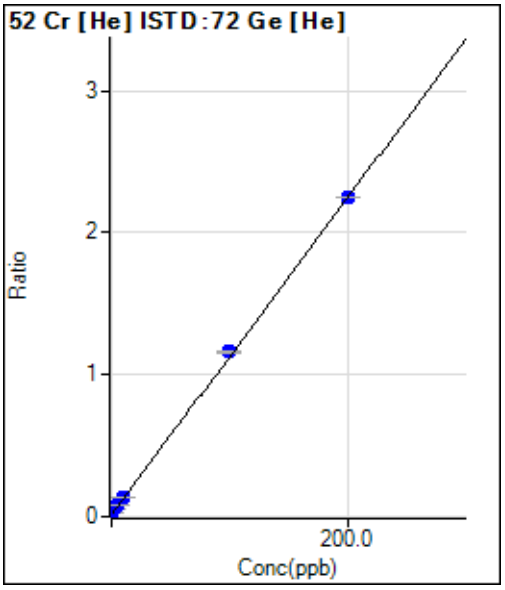
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13943.34	0.0112	P	1.7	
2	☐	2.000	2.140	41396.92	0.0332	P	1.0	7.0
3	☐	5.000	5.131	79759.70	0.0640	P	2.0	2.6
4	☐	10.000	10.300	147128.89	0.1171	P	2.3	3.0
5	☐	100.000	100.638	1363573.10	1.0457	P	0.4	0.6
6	☐	200.000	199.661	2678572.61	2.0637	P	0.9	-0.2
7	☐	1.000						

y = 0.0103 * x + 0.0112
R = 1.0000
DL = 0.0563 ppb
BEC = 1.092 ppb

Weight: <None>
Min Conc: <None>

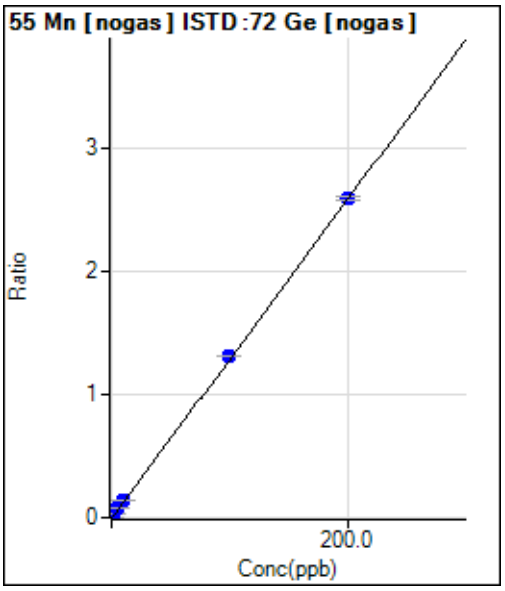


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11521.26	0.0248	P	4.0	
2	☐	2.000	2.273	23441.79	0.0502	P	0.1	13.7
3	☐	5.000	5.085	38315.42	0.0816	P	2.4	1.7
4	☐	10.000	10.253	66629.92	0.1393	P	1.3	2.5
5	☐	100.000	101.749	559862.15	1.1613	P	0.9	1.7
6	☐	200.000	199.108	1084604.38	2.2488	P	0.5	-0.4
7	☐	1.000						

y = 0.0112 * x + 0.0248
R = 0.9999
DL = 0.2638 ppb
BEC = 2.222 ppb

Weight: <None>
Min Conc: <None>

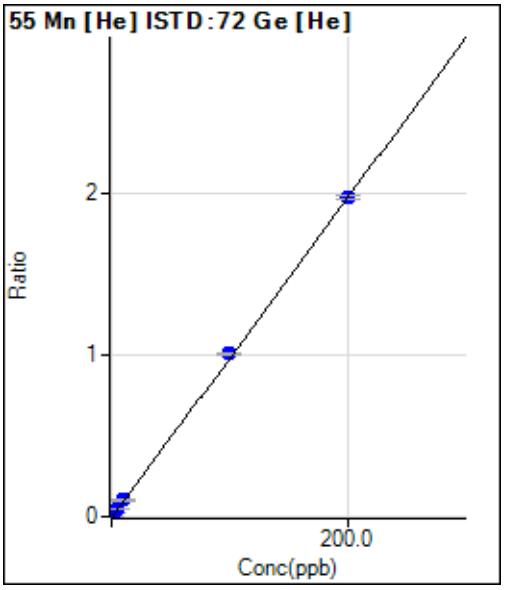
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5824.55	0.0047	P	4.8	
2	☐	2.000	2.110	40039.95	0.0321	P	2.0	5.5
3	☐	5.000	5.162	89554.35	0.0718	P	1.0	3.2
4	☐	10.000	10.363	175221.41	0.1395	P	2.0	3.6
5	☐	100.000	100.875	1716706.95	1.3167	P	0.7	0.9
6	☐	200.000	199.539	3374570.16	2.5999	P	1.0	-0.2
7	☐	1.000						

y = 0.0130 * x + 0.0047
R = 1.0000
DL = 0.05196 ppb
BEC = 0.3605 ppb

Weight: <None>
Min Conc: <None>

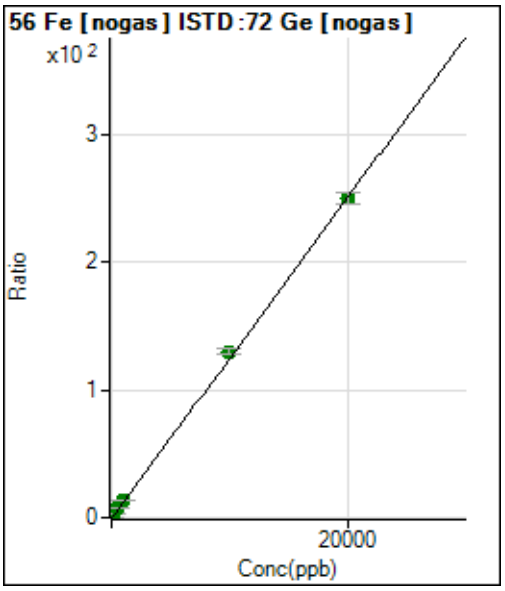


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	453.35	0.0010	P	1.2	
2	☐	2.000	2.094	10170.26	0.0218	P	3.8	4.7
3	☐	5.000	5.130	24383.33	0.0519	P	2.0	2.6
4	☐	10.000	10.161	48742.44	0.1019	P	2.7	1.6
5	☐	100.000	101.482	486583.89	1.0092	P	0.4	1.5
6	☐	200.000	199.247	955225.33	1.9806	P	0.7	-0.4
7	☐	1.000						

y = 0.0099 * x + 9.7674E-004
R = 1.0000
DL = 0.003514 ppb
BEC = 0.09831 ppb

Weight: <None>
Min Conc: <None>

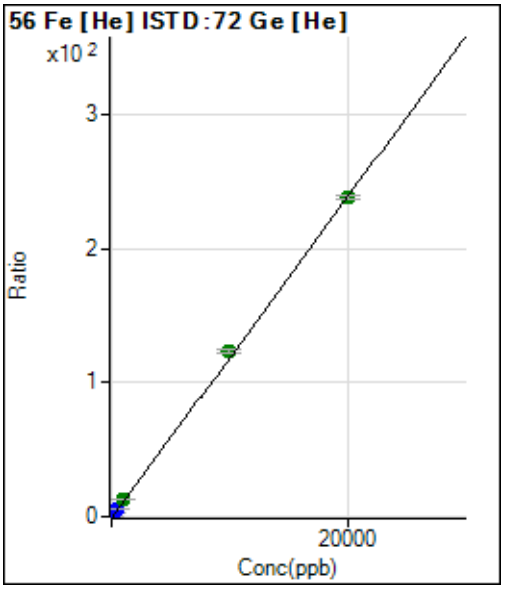
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	599942.20	0.4829	P	0.5	
2	☐	200.000	231.437	4225232.96	3.3913	A	1.0	15.7
3	☐	500.000	557.018	9329005.49	7.4828	A	1.9	11.4
4	☐	1000.000	1083.899	17719908.90	14.1039	A	0.6	8.4
5	☐	10000.00	10305.94	169390247.4	129.993	A	3.6	3.1
6	☐	20000.00	19841.09	324059628.5	249.817	A	3.3	-0.8
7	☐	100.000						

y = 0.0126 * x + 0.4829
R = 0.9998
DL = 0.5714 ppb
BEC = 38.43 ppb

Weight: <None>
Min Conc: <None>

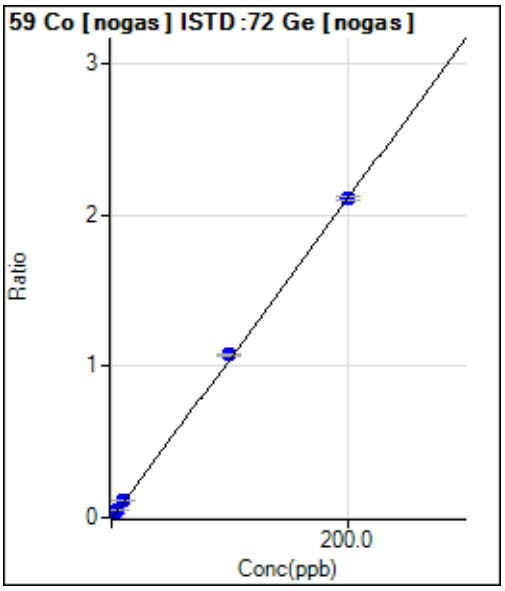


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19283.14	0.0415	P	2.4	
2	☐	200.000	183.416	1045831.65	2.2399	P	0.1	-8.3
3	☐	500.000	447.083	2535024.34	5.4000	P	1.7	-10.6
4	☐	1000.000	1067.836	6139400.53	12.8401	A	1.2	6.8
5	☐	10000.00	10263.59	59318889.12	123.055	A	2.0	2.6
6	☐	20000.00	19866.30	114857451.6	238.148	A	1.5	-0.7
7	☐	100.000						

y = 0.0120 * x + 0.0415
R = 0.9999
DL = 0.2482 ppb
BEC = 3.466 ppb

Weight: <None>
Min Conc: <None>

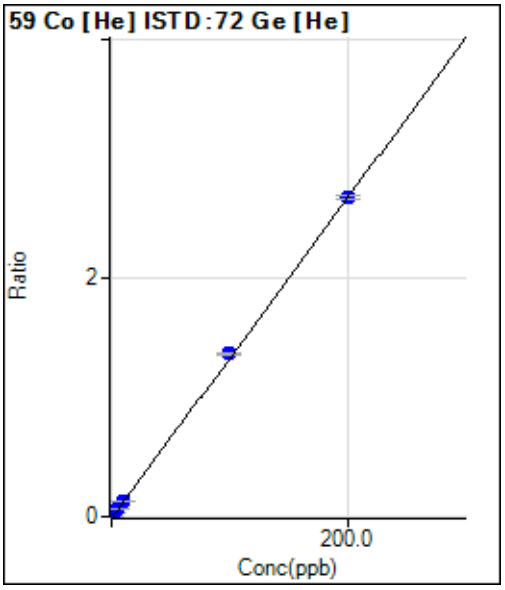
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	38.	
2	☐	2.000	2.068	27455.29	0.0220	P	1.9	3.4
3	☐	5.000	5.203	68954.55	0.0553	P	0.5	4.1
4	☐	10.000	10.343	138014.74	0.1098	P	1.4	3.4
5	☐	100.000	101.699	1407179.35	1.0793	P	0.9	1.7
6	☐	200.000	199.127	2742944.54	2.1132	P	0.8	-0.4
7	☐	1.000						

y = 0.0106 * x + 8.6050E-005
R = 1.0000
DL = 0.009354 ppb
BEC = 0.008109 ppb

Weight: <None>
Min Conc: <None>

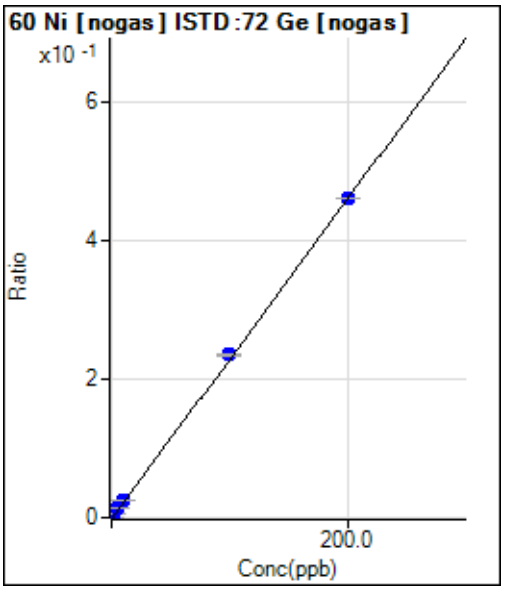


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	68.	
2	☐	2.000	2.065	12992.46	0.0278	P	3.7	3.3
3	☐	5.000	5.217	32973.01	0.0702	P	3.0	4.3
4	☐	10.000	9.956	64079.58	0.1340	P	2.0	-0.4
5	☐	100.000	101.454	658258.18	1.3655	P	1.0	1.5
6	☐	200.000	199.269	1293478.81	2.6819	P	1.7	-0.4
7	☐	1.000						

y = 0.0135 * x + 3.5819E-005
R = 1.0000
DL = 0.005485 ppb
BEC = 0.002661 ppb

Weight: <None>
Min Conc: <None>

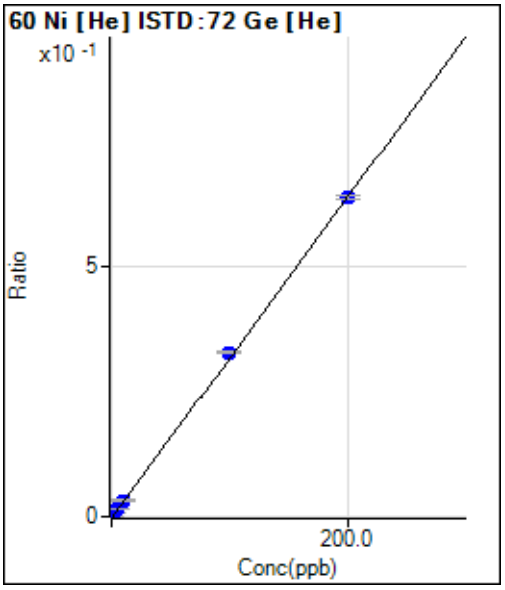
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.67	0.0003	P	29.	
2	☐	2.000	2.058	6258.09	0.0050	P	2.4	2.9
3	☐	5.000	5.318	15685.09	0.0126	P	0.9	6.4
4	☐	10.000	10.451	30745.16	0.0245	P	3.6	4.5
5	☐	100.000	101.532	307138.77	0.2355	P	0.5	1.5
6	☐	200.000	199.203	599566.32	0.4619	P	0.6	-0.4
7	☐	1.000						

y = 0.0023 * x + 2.5458E-004
R = 1.0000
DL = 0.09636 ppb
BEC = 0.1099 ppb

Weight: <None>
Min Conc: <None>

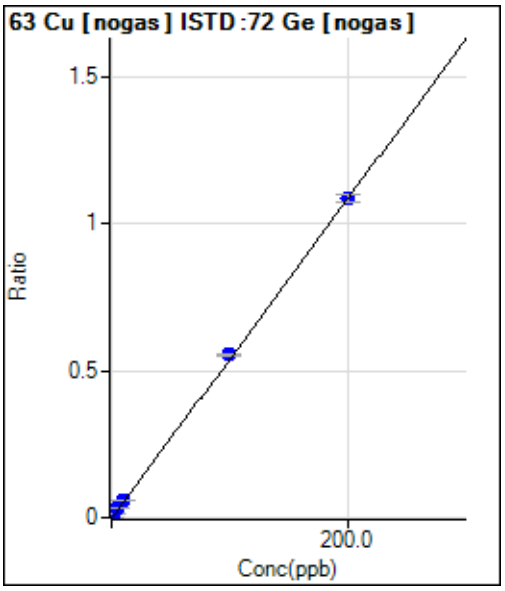


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	25.	
2	☐	2.000	2.206	3447.12	0.0074	P	0.7	10.3
3	☐	5.000	5.250	8038.96	0.0171	P	1.2	5.0
4	☐	10.000	10.043	15518.21	0.0325	P	3.0	0.4
5	☐	100.000	102.349	158044.05	0.3278	P	1.2	2.3
6	☐	200.000	198.815	306970.06	0.6365	P	0.9	-0.6
7	☐	1.000						

y = 0.0032 * x + 3.2371E-004
R = 0.9999
DL = 0.0763 ppb
BEC = 0.1012 ppb

Weight: <None>
Min Conc: <None>

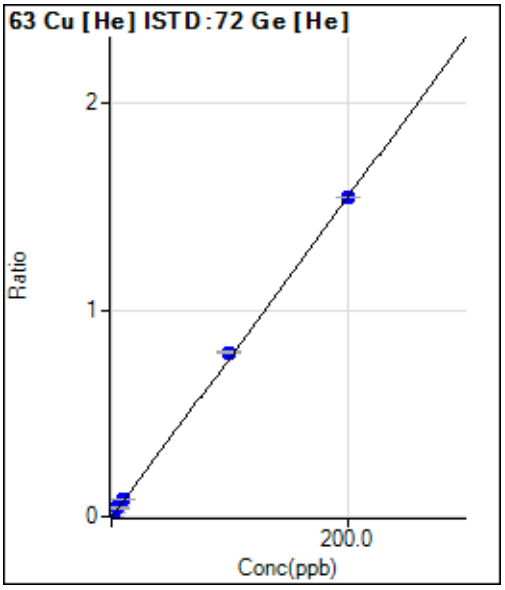
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2380.22	0.0019	P	6.2	
2	☐	2.000	1.957	15648.35	0.0126	P	2.5	-2.2
3	☐	5.000	5.088	36905.59	0.0296	P	0.7	1.8
4	☐	10.000	10.509	74243.17	0.0591	P	0.8	5.1
5	☐	100.000	101.300	721249.54	0.5531	P	0.5	1.3
6	☐	200.000	199.323	1409706.96	1.0864	P	1.9	-0.3
7	☐	1.000						

y = 0.0054 * x + 0.0019
R = 1.0000
DL = 0.06534 ppb
BEC = 0.3521 ppb

Weight: <None>
Min Conc: <None>

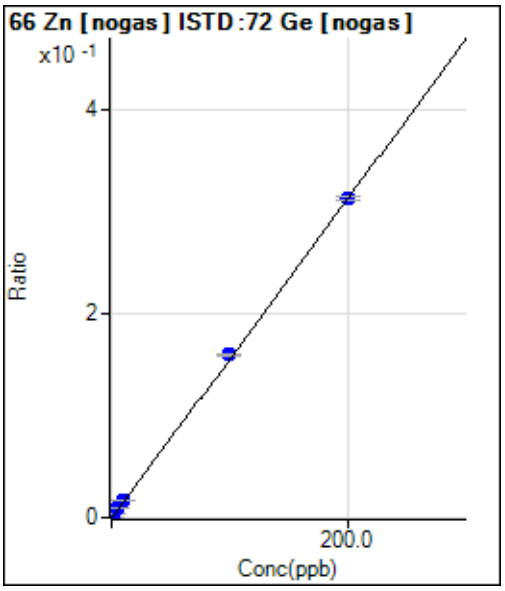


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1316.76	0.0028	P	1.7	
2	☐	2.000	2.008	8595.95	0.0184	P	3.0	0.4
3	☐	5.000	5.127	20000.25	0.0426	P	4.1	2.5
4	☐	10.000	10.250	39368.65	0.0823	P	1.0	2.5
5	☐	100.000	102.120	383213.65	0.7949	P	0.4	2.1
6	☐	200.000	198.924	745484.52	1.5457	P	0.1	-0.5
7	☐	1.000						

y = 0.0078 * x + 0.0028
R = 0.9999
DL = 0.01887 ppb
BEC = 0.3658 ppb

Weight: <None>
Min Conc: <None>

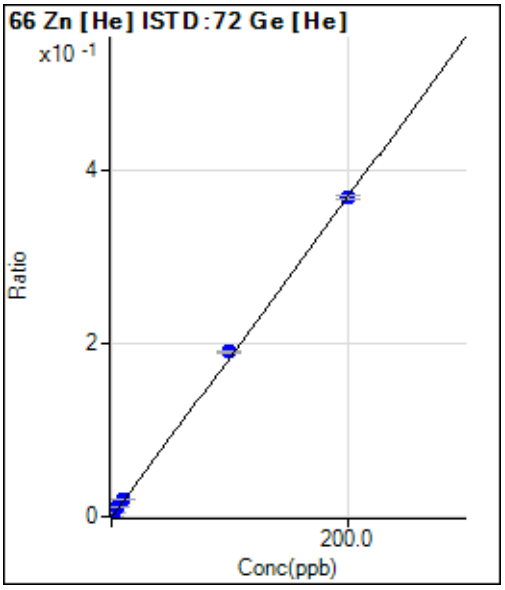
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	890.04	0.0007	P	6.6	
2	☐	2.000	2.192	5174.31	0.0042	P	4.1	9.6
3	☐	5.000	5.277	11214.40	0.0090	P	3.9	5.5
4	☐	10.000	10.388	21372.15	0.0170	P	0.9	3.9
5	☐	100.000	101.323	208167.25	0.1596	P	0.7	1.3
6	☐	200.000	199.310	406635.67	0.3133	P	1.4	-0.3
7	☐	1.000						

y = 0.0016 * x + 7.1645E-004
R = 1.0000
DL = 0.09071 ppb
BEC = 0.4568 ppb

Weight: <None>
Min Conc: <None>

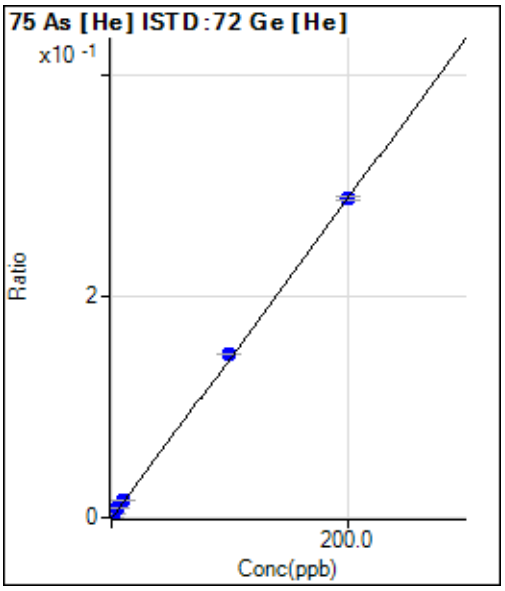


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	400.01	0.0009	P	1.7	
2	☐	2.000	2.055	2180.20	0.0047	P	8.4	2.8
3	☐	5.000	5.130	4867.54	0.0104	P	1.0	2.6
4	☐	10.000	10.036	9303.03	0.0195	P	5.4	0.4
5	☐	100.000	102.352	91853.66	0.1905	P	1.7	2.4
6	☐	200.000	198.818	178126.66	0.3693	P	1.1	-0.6
7	☐	1.000						

y = 0.0019 * x + 8.6172E-004
R = 0.9999
DL = 0.02358 ppb
BEC = 0.465 ppb

Weight: <None>
Min Conc: <None>

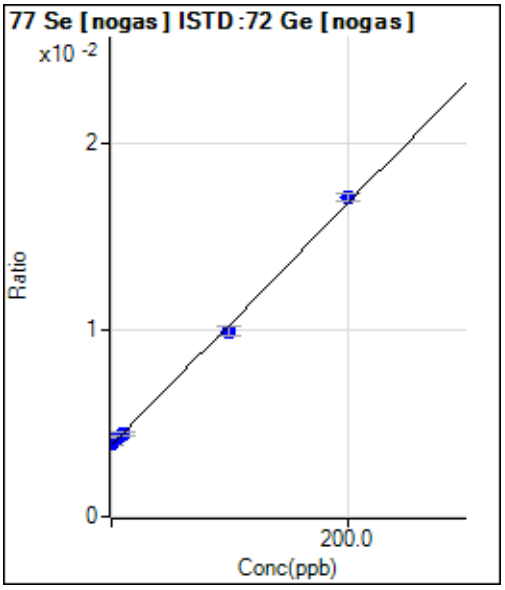
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	282.23	0.0006	P	15.	
2	☐	2.000	2.109	1706.77	0.0037	P	2.9	5.5
3	☐	5.000	5.122	3759.38	0.0080	P	2.0	2.4
4	☐	10.000	10.137	7294.05	0.0153	P	1.4	1.4
5	☐	100.000	101.772	71176.67	0.1476	P	1.0	1.8
6	☐	200.000	199.103	139031.39	0.2883	P	0.6	-0.4
7	☐	1.000						

y = 0.0014 * x + 6.0867E-004
R = 0.9999
DL = 0.2008 ppb
BEC = 0.4213 ppb

Weight: <None>
Min Conc: <None>

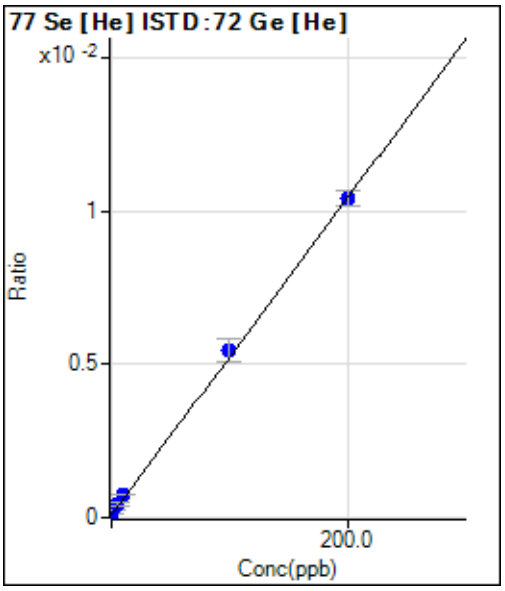


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4870.90	0.0039	P	4.5	
2	☐	2.000	2.735	5107.64	0.0041	P	1.8	36.7
3	☐	5.000	4.941	5287.70	0.0042	P	3.2	-1.2
4	☐	10.000	7.427	5531.12	0.0044	P	4.9	-25.7
5	☐	100.000	92.824	12915.78	0.0099	P	5.2	-7.2
6	☐	200.000	203.711	22156.86	0.0171	P	2.6	1.9
7	☐	1.000						

y = 6.4567E-005 * x + 0.0039
R = 0.9990
DL = 8.277 ppb
BEC = 60.74 ppb

Weight: <None>
Min Conc: <None>

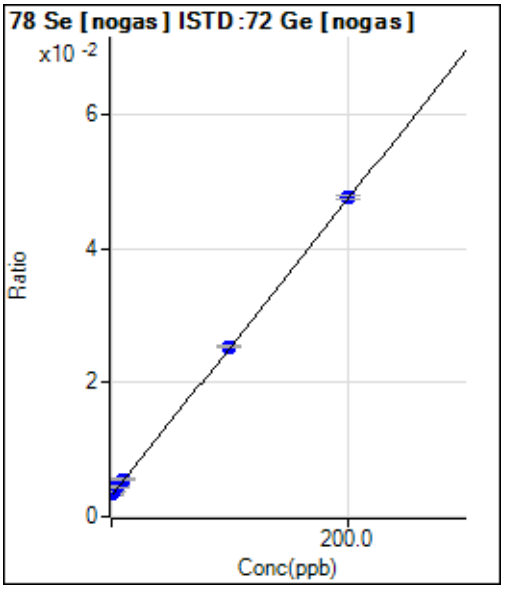
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	23.	
2	☐	2.000	3.427	146.67	0.0003	P	40.	71.3
3	☐	5.000	5.868	206.67	0.0004	P	17.	17.4
4	☐	10.000	11.767	356.68	0.0007	P	2.7	17.7
5	☐	100.000	102.604	2630.27	0.0055	P	13.	2.6
6	☐	200.000	198.574	5027.65	0.0104	P	4.9	-0.7
7	☐	1.000						

y = 5.1808E-005 * x + 1.3628E-004
R = 0.9999
DL = 1.844 ppb
BEC = 2.63 ppb

Weight: <None>
Min Conc: <None>

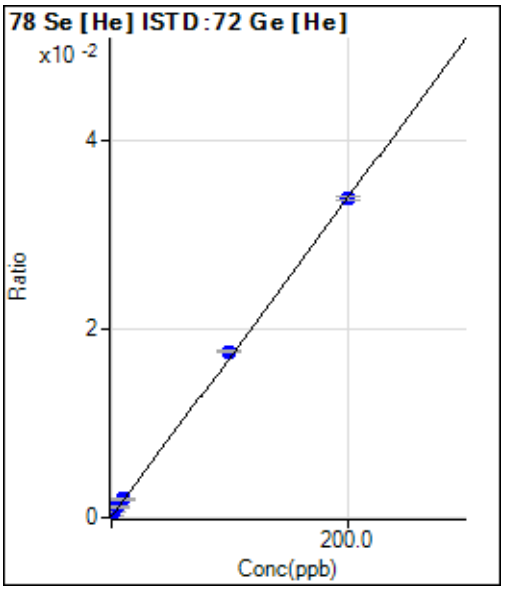


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4190.67	0.0034	P	4.6	
2	☐	2.000	1.866	4717.50	0.0038	P	4.5	-6.7
3	☐	5.000	4.899	5557.79	0.0045	P	6.5	-2.0
4	☐	10.000	9.971	7011.77	0.0056	P	5.9	-0.3
5	☐	100.000	99.530	33150.71	0.0254	P	0.5	-0.5
6	☐	200.000	200.241	61952.60	0.0477	P	1.4	0.1
7	☐	1.000						

y = 2.2154E-004 * x + 0.0034
R = 1.0000
DL = 2.085 ppb
BEC = 15.23 ppb

Weight: <None>
Min Conc: <None>

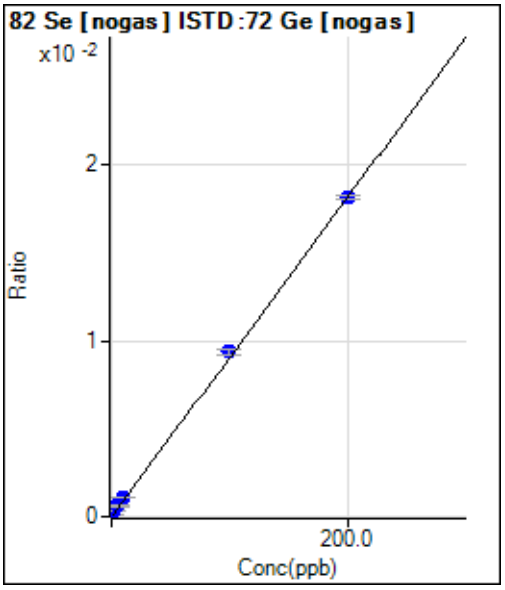
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0003	P	3.8	
2	☐	2.000	2.099	296.67	0.0006	P	6.6	5.0
3	☐	5.000	5.067	534.01	0.0011	P	3.2	1.3
4	☐	10.000	10.029	945.36	0.0020	P	4.0	0.3
5	☐	100.000	102.622	8505.12	0.0176	P	0.9	2.6
6	☐	200.000	198.685	16346.98	0.0339	P	0.8	-0.7
7	☐	1.000						

y = 1.6918E-004 * x + 2.8007E-004
R = 0.9999
DL = 0.1894 ppb
BEC = 1.655 ppb

Weight: <None>
Min Conc: <None>

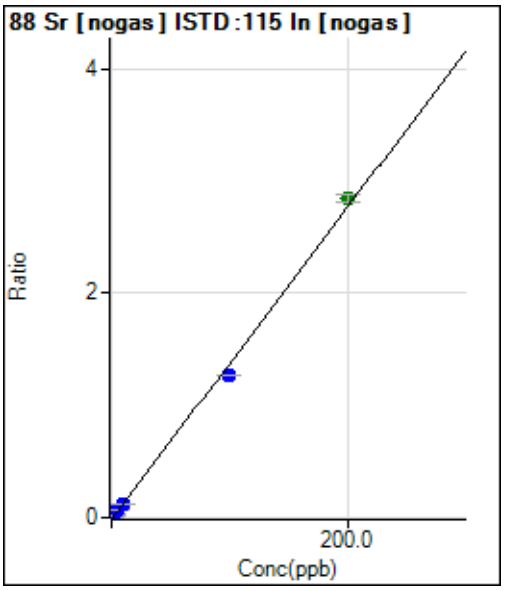


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0001	P	33.	
2	☐	2.000	2.610	400.01	0.0003	P	15.	30.5
3	☐	5.000	5.727	753.37	0.0006	P	6.2	14.5
4	☐	10.000	11.127	1376.76	0.0011	P	4.2	11.3
5	☐	100.000	102.077	12231.93	0.0094	P	3.9	2.1
6	☐	200.000	198.881	23609.05	0.0182	P	1.5	-0.6
7	☐	1.000						

y = 9.1047E-005 * x + 8.3030E-005
R = 0.9999
DL = 0.9068 ppb
BEC = 0.9119 ppb

Weight: <None>
Min Conc: <None>

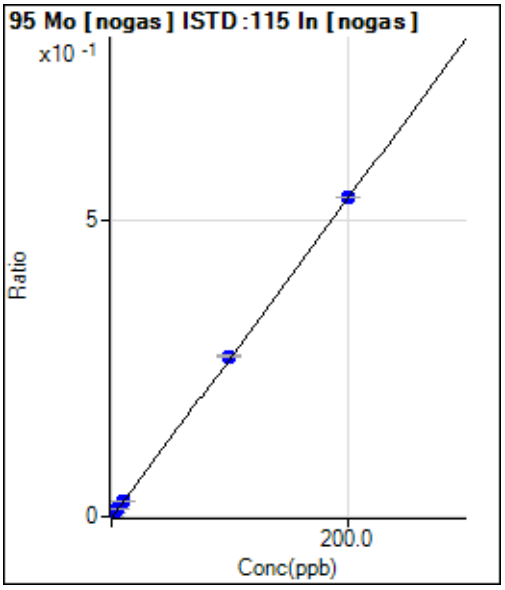
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	410.01	0.0003	P	5.1	
2	☐	2.000	1.840	34544.13	0.0259	P	1.8	-8.0
3	☐	5.000	4.591	86237.86	0.0642	P	1.6	-8.2
4	☐	10.000	9.002	171018.55	0.1257	P	0.6	-10.0
5	☐	100.000	90.975	1762014.92	1.2674	P	0.7	-9.0
6	☐	200.000	204.574	3975639.73	2.8495	A	2.3	2.3
7	☐	1.000						

y = 0.0139 * x + 3.0838E-004
R = 0.9986
DL = 0.003383 ppb
BEC = 0.02214 ppb

Weight: <None>
Min Conc: <None>

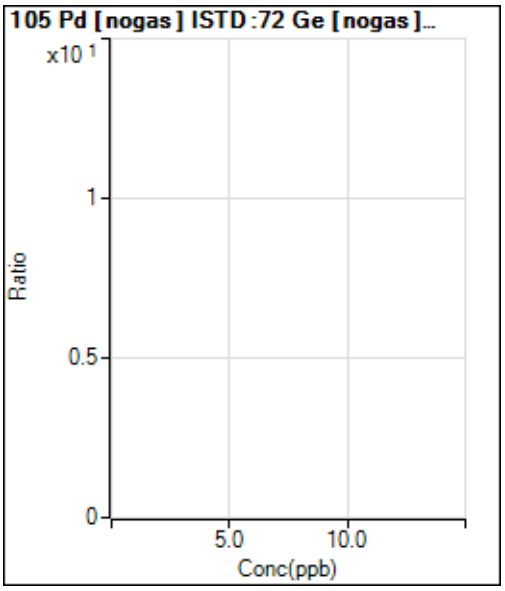


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	246.68	0.0002	P	13.	
2	☐	2.000	2.030	7515.39	0.0056	P	1.4	1.5
3	☐	5.000	4.899	17927.88	0.0134	P	3.5	-2.0
4	☐	10.000	9.912	36509.02	0.0268	P	0.8	-0.9
5	☐	100.000	100.377	375463.04	0.2700	P	1.5	0.4
6	☐	200.000	199.818	750005.72	0.5374	P	0.5	-0.1
7	☐	1.000						

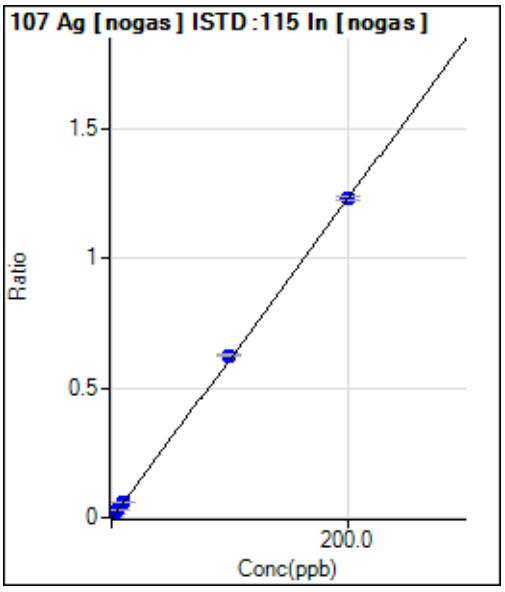
y = 0.0027 * x + 1.8543E-004
R = 1.0000
DL = 0.02871 ppb
BEC = 0.06897 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	13.	
2	☐	2.000	2.089	17330.63	0.0130	P	3.7	4.4
3	☐	5.000	5.105	42505.72	0.0317	P	3.1	2.1
4	☐	10.000	10.027	84504.47	0.0621	P	0.8	0.3
5	☐	100.000	101.372	871928.94	0.6270	P	1.5	1.4
6	☐	200.000	199.309	1720687.99	1.2327	P	1.0	-0.3
7	☐	1.000						

y = 0.0062 * x + 9.5324E-005

R = 1.0000

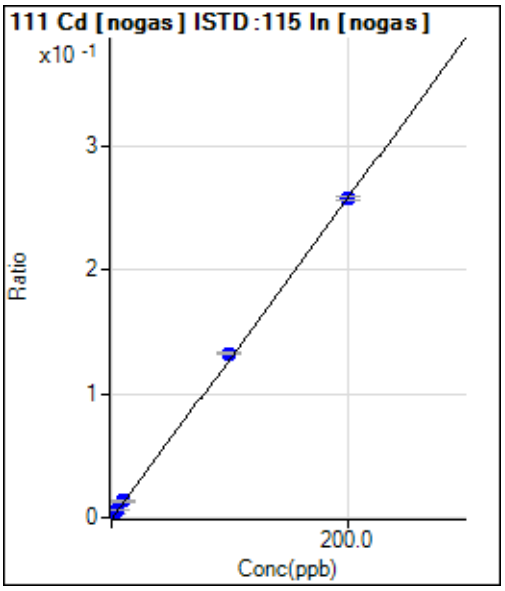
DL = 0.006033 ppb

BEC = 0.01541 ppb

Weight: <None>

Min Conc: <None>

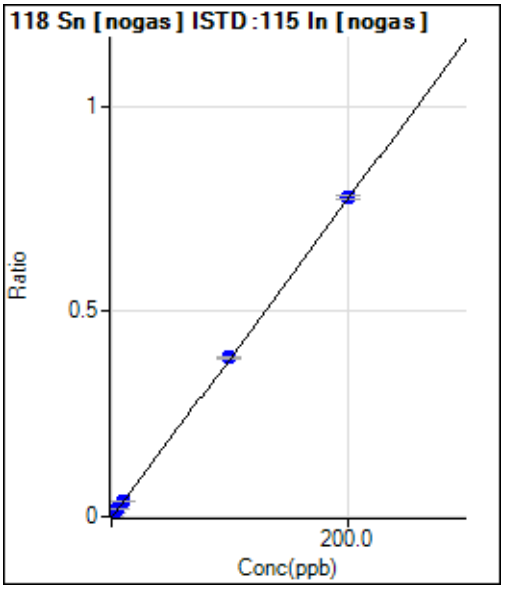
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.978	3417.14	0.0026	P	7.2	-1.1
3	☐	5.000	5.024	8742.76	0.0065	P	3.1	0.5
4	☐	10.000	10.265	18108.21	0.0133	P	2.2	2.7
5	☐	100.000	102.192	184266.41	0.1325	P	1.6	2.2
6	☐	200.000	198.890	359975.67	0.2579	P	1.2	-0.6
7	☐	1.000						

y = 0.0013 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

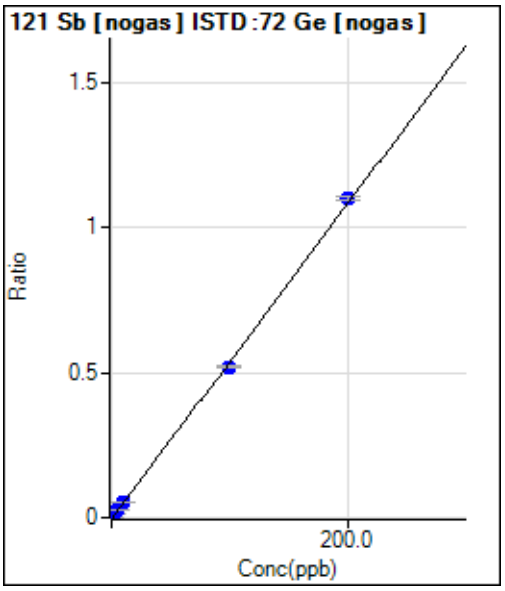


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1160.07	0.0009	P	8.9	
2	☐	2.000	1.979	11404.69	0.0086	P	1.8	-1.0
3	☐	5.000	4.903	26735.05	0.0199	P	0.9	-1.9
4	☐	10.000	9.752	52739.59	0.0388	P	2.8	-2.5
5	☐	100.000	99.532	538983.76	0.3875	P	1.9	-0.5
6	☐	200.000	200.249	1087308.76	0.7788	P	1.7	0.1
7	☐	1.000						

y = 0.0039 * x + 8.7188E-004
R = 1.0000
DL = 0.06007 ppb
BEC = 0.2244 ppb

Weight: <None>
Min Conc: <None>

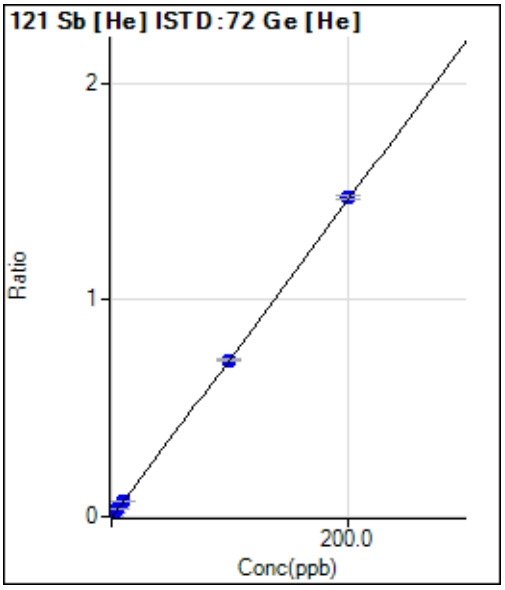
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	943.39	0.0008	P	12.	
2	☐	2.000	1.815	13239.62	0.0106	P	1.8	-9.3
3	☐	5.000	4.596	32096.16	0.0257	P	1.6	-8.1
4	☐	10.000	9.488	65756.34	0.0523	P	1.7	-5.1
5	☐	100.000	95.366	677206.52	0.5192	P	1.2	-4.6
6	☐	200.000	202.354	1429430.97	1.1008	P	1.0	1.2
7	☐	1.000						

y = 0.0054 * x + 7.5892E-004
R = 0.9996
DL = 0.05359 ppb
BEC = 0.1396 ppb

Weight: <None>
Min Conc: <None>

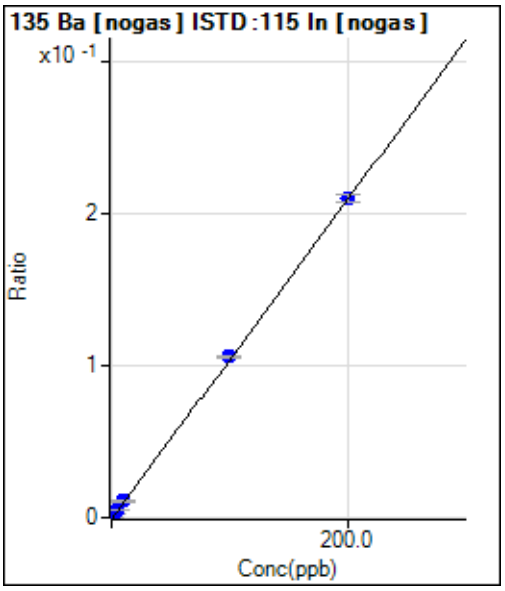


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	523.35	0.0011	P	22.	
2	☐	2.000	1.888	6991.81	0.0150	P	3.9	-5.6
3	☐	5.000	4.734	16826.74	0.0358	P	2.0	-5.3
4	☐	10.000	9.293	33118.37	0.0693	P	2.9	-7.1
5	☐	100.000	98.261	347852.03	0.7216	P	1.0	-1.7
6	☐	200.000	200.913	711022.05	1.4742	P	1.3	0.5
7	☐	1.000						

y = 0.0073 * x + 0.0011
R = 0.9999
DL = 0.1014 ppb
BEC = 0.154 ppb

Weight: <None>
Min Conc: <None>

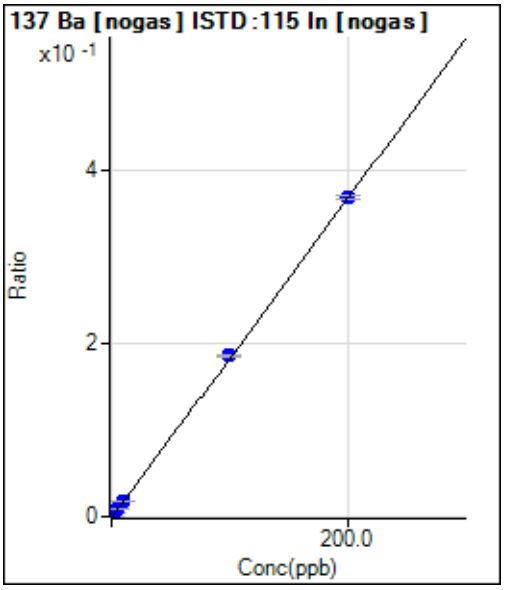
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	79.	
2	☐	2.000	1.903	2696.97	0.0020	P	4.1	-4.9
3	☐	5.000	4.896	6948.47	0.0052	P	3.9	-2.1
4	☐	10.000	10.364	14881.32	0.0109	P	4.6	3.6
5	☐	100.000	100.617	147381.56	0.1060	P	1.1	0.6
6	☐	200.000	199.677	293650.93	0.2103	P	2.1	-0.2
7	☐	1.000						

y = 0.0011 * x + 2.0141E-005
R = 1.0000
DL = 0.04535 ppb
BEC = 0.01912 ppb

Weight: <None>
Min Conc: <None>

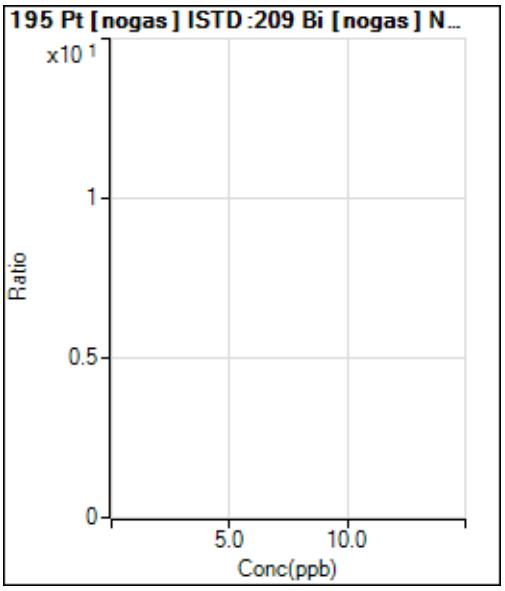


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	60.00	0.0000	P	66.	
2	☐	2.000	2.043	5084.34	0.0038	P	5.1	2.1
3	☐	5.000	4.930	12275.49	0.0091	P	3.5	-1.4
4	☐	10.000	9.981	25132.39	0.0185	P	1.7	-0.2
5	☐	100.000	100.743	258693.45	0.1860	P	1.4	0.7
6	☐	200.000	199.631	514524.84	0.3686	P	1.5	-0.2
7	☐	1.000						

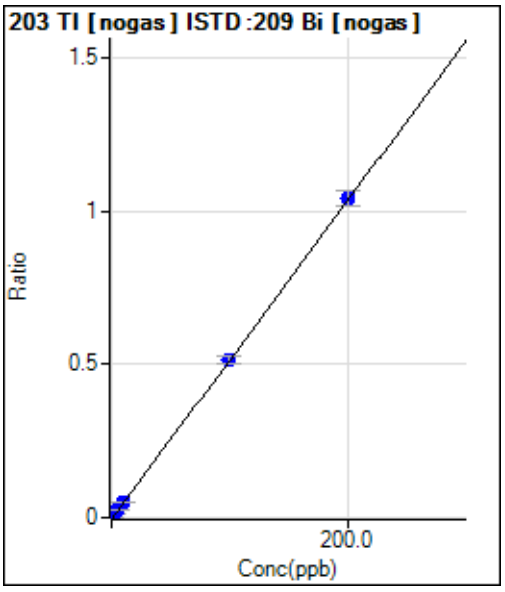
y = 0.0018 * x + 4.4988E-005
R = 1.0000
DL = 0.04865 ppb
BEC = 0.02437 ppb

Weight: <None>
Min Conc: <None>

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000						
2	☐	2.000						
3	☐	5.000						
4	☐	10.000						
5	☐	100.000						
6	☐	200.000						
7	☐	1.000						

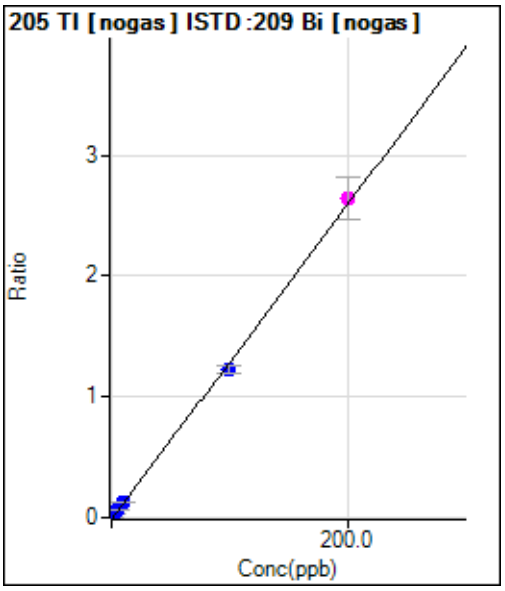


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	61.	
2	☐	2.000	2.020	11932.13	0.0105	P	4.4	1.0
3	☐	5.000	4.864	29121.30	0.0253	P	2.8	-2.7
4	☐	10.000	9.847	59181.47	0.0512	P	5.1	-1.5
5	☐	100.000	99.419	621523.73	0.5167	P	4.6	-0.6
6	☐	200.000	200.301	1259123.86	1.0410	P	4.3	0.2
7	☐	1.000						

y = 0.0052 * x + 2.0474E-005
R = 1.0000
DL = 0.00722 ppb
BEC = 0.003939 ppb

Weight: <None>
Min Conc: <None>

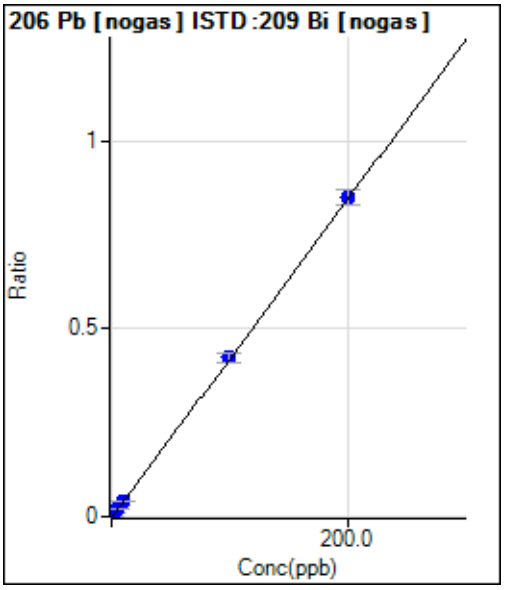
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	96.67	0.0001	P	59.	
2	☐	2.000	1.898	28139.33	0.0248	P	5.0	-5.1
3	☐	5.000	4.682	70196.72	0.0611	P	7.8	-6.4
4	☐	10.000	9.408	141797.77	0.1227	P	5.2	-5.9
5	☐	100.000	94.419	1479888.10	1.2304	P	5.4	-5.6
6	☐	200.000	202.829	3194326.73	2.6430	M	13.	1.4
7	☐	1.000						

y = 0.0130 * x + 8.6818E-005
R = 0.9995
DL = 0.01179 ppb
BEC = 0.006663 ppb

Weight: <None>
Min Conc: <None>

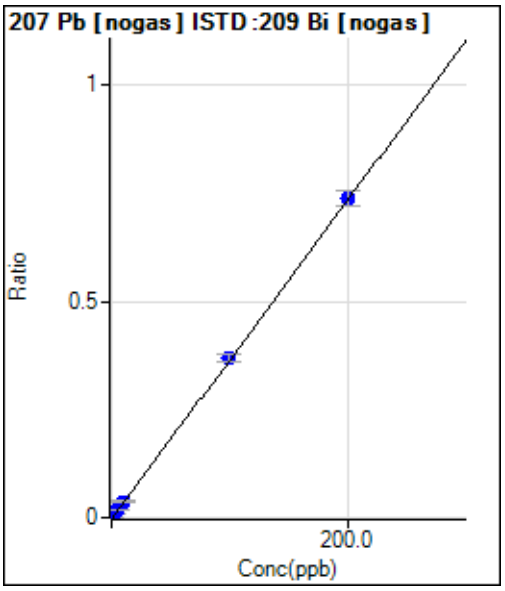


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	17.	
2	☐	2.000	2.059	10173.90	0.0090	P	5.3	2.9
3	☐	5.000	4.990	24629.21	0.0214	P	3.8	-0.2
4	☐	10.000	9.892	48794.53	0.0422	P	6.0	-1.1
5	☐	100.000	99.728	509367.58	0.4235	P	5.8	-0.3
6	☐	200.000	200.141	1027709.36	0.8497	P	4.9	0.1
7	☐	1.000						

y = 0.0042 * x + 2.3320E-004
R = 1.0000
DL = 0.0287 ppb
BEC = 0.05495 ppb

Weight: <None>
Min Conc: <None>

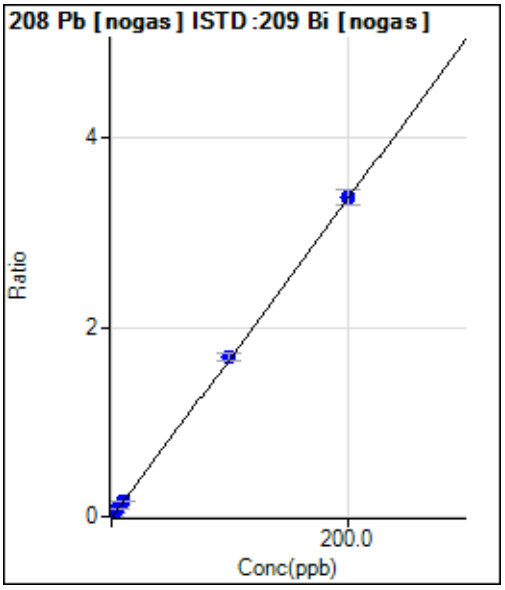
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	12.	
2	☐	2.000	1.996	8579.52	0.0076	P	6.4	-0.2
3	☐	5.000	4.956	21263.49	0.0185	P	4.1	-0.9
4	☐	10.000	9.949	42646.88	0.0369	P	6.0	-0.5
5	☐	100.000	99.762	442855.89	0.3682	P	5.3	-0.2
6	☐	200.000	200.123	893027.69	0.7384	P	4.3	0.1
7	☐	1.000						

y = 0.0037 * x + 2.0470E-004
R = 1.0000
DL = 0.02092 ppb
BEC = 0.0555 ppb

Weight: <None>
Min Conc: <None>

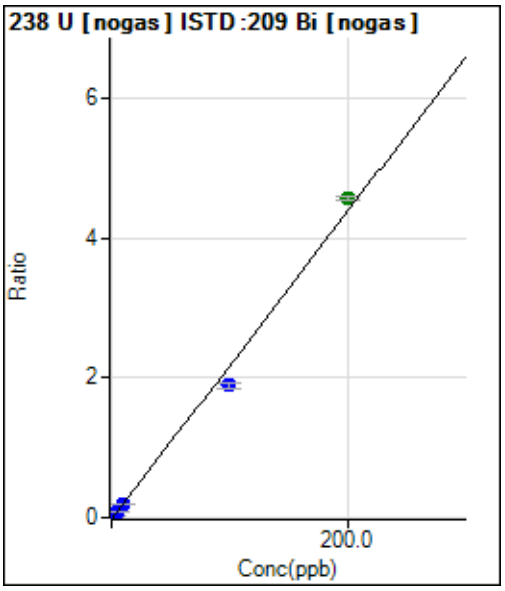


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1010.04	0.0009	P	2.5	
2	☐	2.000	2.020	39686.57	0.0350	P	5.7	1.0
3	☐	5.000	4.968	97473.88	0.0848	P	5.8	-0.6
4	☐	10.000	9.895	194140.91	0.1680	P	5.4	-1.0
5	☐	100.000	100.000	2031821.92	1.6892	P	5.3	0.0
6	☐	200.000	200.006	4085189.52	3.3776	P	4.5	0.0
7	☐	1.000						

y = 0.0169 * x + 9.0060E-004
R = 1.0000
DL = 0.003932 ppb
BEC = 0.05334 ppb

Weight: <None>
Min Conc: <None>

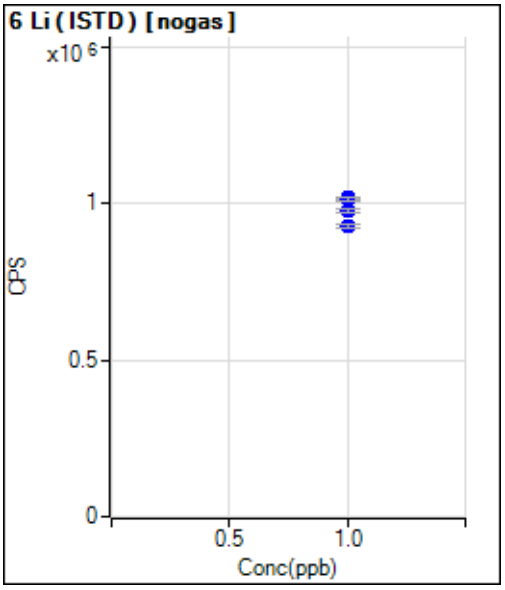
Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	42.	
2	☐	2.000	1.685	42216.86	0.0372	P	6.0	-15.7
3	☐	5.000	4.191	106377.95	0.0925	P	6.3	-16.2
4	☐	10.000	8.469	216143.53	0.1870	P	4.0	-15.3
5	☐	100.000	85.620	2273215.02	1.8899	P	5.2	-14.4
6	☐	200.000	207.290	5533669.08	4.5755	A	0.8	3.6
7	☐	1.000						

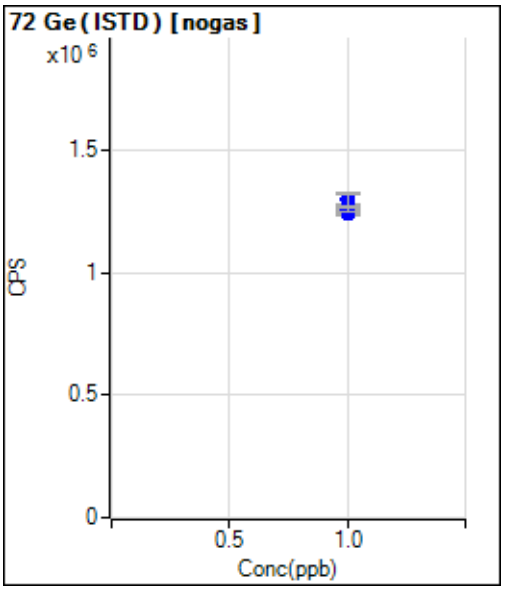
y = 0.0221 * x + 3.2725E-005
R = 0.9965
DL = 0.001895 ppb
BEC = 0.001483 ppb

Weight: <None>
Min Conc: <None>

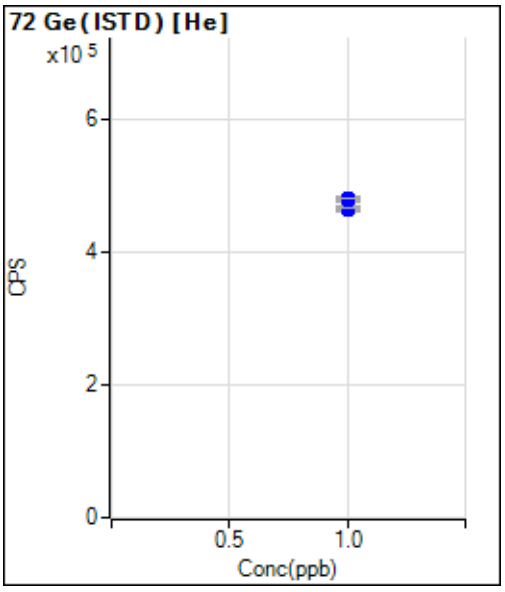


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1019192.69		P	0.5	
2	☐	1.000		1016035.97		P	0.2	
3	☐	1.000		1016954.73		P	0.9	
4	☐	1.000		1015407.04		P	1.3	
5	☐	1.000		976552.32		P	1.3	
6	☐	1.000		926974.35		P	1.9	
7	☐	1.000						

Calibration for 277_ICV.d

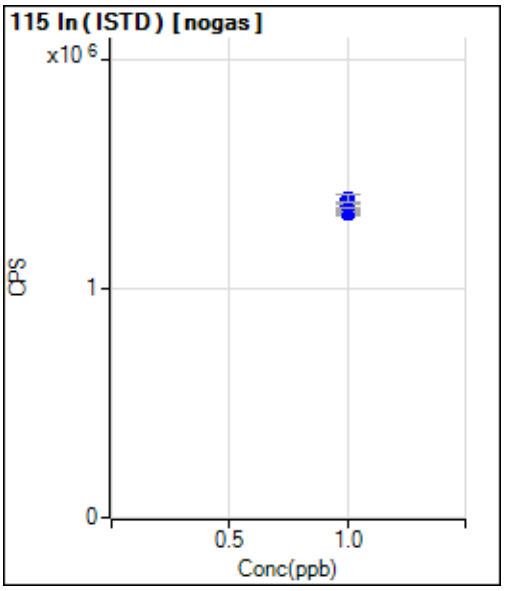


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1242233.31		P	0.9	
2	☐	1.000		1245996.44		P	1.2	
3	☐	1.000		1246871.81		P	1.2	
4	☐	1.000		1256449.30		P	1.2	
5	☐	1.000		1304023.52		P	3.2	
6	☐	1.000		1298265.14		P	3.8	
7	☐	1.000						

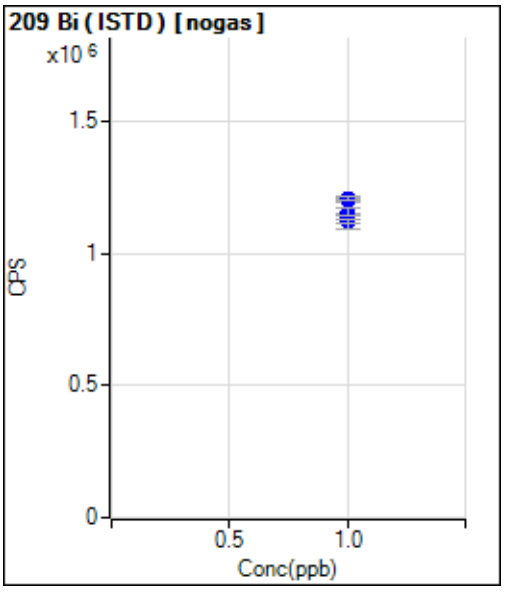


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		464161.96		P	1.0	
2	☐	1.000		466914.16		P	0.6	
3	☐	1.000		469461.87		P	0.5	
4	☐	1.000		478144.43		P	0.6	
5	☐	1.000		482116.50		P	1.2	
6	☐	1.000		482303.47		P	0.3	
7	☐	1.000						

Calibration for 277_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1329983.84		P	1.1	
2	☐	1.000		1332076.31		P	0.9	
3	☐	1.000		1342284.17		P	0.2	
4	☐	1.000		1360697.93		P	0.8	
5	☐	1.000		1390340.87		P	2.9	
6	☐	1.000		1395713.28		P	2.4	
7	☐	1.000						



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1120971.65		P	4.6	
2	☐	1.000		1135220.37		P	3.2	
3	☐	1.000		1151572.04		P	4.3	
4	☐	1.000		1156950.63		P	2.7	
5	☐	1.000		1203047.66		P	0.9	
6	☐	1.000		1209451.39		P	1.2	
7	☐	1.000						

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	278_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:03:52-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.107	22.3	585	20.5	1	
B	11	1	nogas	10.963	13.3	52636	7.9	10	ICB Main CR1 Failed
Al	27	1	nogas	2.000	8.8	56755	2.1	5	
P	31	1	nogas	32.389	14.2	23772	0.1	10	ICB Main CR1 Failed
Ti	47	1	nogas	0.293	18.0	480	10.8	2.5	
Ni	60	1	nogas	0.122	14.8	673	9.1	2.5	
Cu	63	1	nogas	0.250	21.3	4097	7.6	1	
Zn	66	1	nogas	0.910	5.0	2684	4.1	2.5	
Se	77	1	nogas	-26.798	-7.6	2744	6.7	2.5	
Se	82	1	nogas	0.318	60.6	140	14.3	1	
Sr	88	1	nogas	0.097	8.5	2247	7.2	2.5	
Mo	95	1	nogas	0.498	25.8	2064	23.3	2.5	
Ag	107	1	nogas	0.087	12.3	853	11.3	2.5	
Cd	111	1	nogas	0.089	25.9	157	26.6	1	
Sn	118	1	nogas	1.076	11.4	6825	9.4	5	
Sb	121	1	nogas	3.451	12.7	24401	10.8	2	ICB Main CR1 Failed
Ba	137	1	nogas	0.256	14.3	700	12.2	2.5	
Tl	205	1	nogas	0.182	12.4	2844	15.8	1	
Pb	208	1	nogas	0.156	11.3	4087	12.2	2.5	
U	238	1	nogas	0.127	30.9	3290	34.3	2.5	
Na	23	2	He	10.306	6.8	63521	1.3	100	
Mg	24	2	He	7.061	10.4	8372	9.2	100	
Al	27	2	He	2.263	13.3	3510	6.7	5	
K	39	2	He	12.953	13.2	128030	1.0	100	
Ca	43	2	He	23.440	43.0	107	30.1	100	
Ca	44	2	He	22.353	9.8	1950	4.9	100	
V	51	2	He	-0.523	-6.3	3769	3.7	2.5	
Cr	52	2	He	0.287	25.3	13049	2.1	2.5	
Mn	55	2	He	0.195	8.4	1357	4.8	2.5	
Fe	56	2	He	10.599	6.4	78500	4.3	100	
Co	59	2	He	0.069	29.8	447	29.1	2.5	
Ni	60	2	He	0.134	16.2	350	9.9	2.5	
Cu	63	2	He	0.144	18.5	1843	5.9	1	
Zn	66	2	He	0.845	30.6	1130	19.2	2.5	
As	75	2	He	0.078	23.3	336	2.9	2.5	
Sb	121	2	He	2.528	3.3	9160	3.6	2	ICB Main CR1 Failed
Se	78	2	He	0.343	101.0	157	16.5	1	
Ti	47	2	He	0.198	40.9	60	33.3	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1251528	1.42	1242233	100.75	70	120	
In	115	1	nogas	1351549	0.89	1329984	101.62	70	120	
Li	6	1	nogas	1015907	0.68	1019193	99.68	70	120	

Initial Calibration Blank (ICB) Report

Bi	209	1	nogas	1154526	3.72	1120972	102.99	70	120	
Ge	72	2	He	465732	0.81	464162	100.34	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	280_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:08:02-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	98.991	0.150	491957	1.58	100	99.0	90	110	
B	11	1	nogas	496.839	0.367	1488493	1.78	500	99.4	90	110	
Al	27	1	nogas	103.710	1.924	1228546	2.08	100	103.7	90	110	
P	31	1	nogas	533.250	1.065	59931	3.04	500	106.7	90	110	
Ti	47	1	nogas	104.128	0.857	115521	3.41	100	104.1	90	110	
Ni	60	1	nogas	104.998	0.944	313100	2.76	100	105.0	90	110	
Cu	63	1	nogas	103.334	1.010	725152	2.87	100	103.3	90	110	
Zn	66	1	nogas	102.627	0.902	207909	4.39	100	102.6	90	110	
Se	77	1	nogas	90.165	7.809	12539	7.78	100	90.2	90	110	
Se	82	1	nogas	102.851	3.268	12145	4.53	100	102.9	90	110	
Sr	88	1	nogas	91.332	2.486	1763849	3.74	100	91.3	90	110	
Mo	95	1	nogas	100.846	2.136	376083	3.25	100	100.8	90	110	
Ag	107	1	nogas	117.862	2.091	1010528	3.27	100	117.9	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	102.005	2.607	183350	3.99	100	102.0	90	110	
Sn	118	1	nogas	101.972	2.888	550448	4.36	100	102.0	90	110	
Sb	121	1	nogas	98.481	1.799	689319	4.13	100	98.5	90	110	
Ba	137	1	nogas	100.614	2.512	257533	3.55	100	100.6	90	110	
Tl	205	1	nogas	96.079	6.433	1489747	5.45	100	96.1	90	110	
Pb	208	1	nogas	101.603	5.829	2042348	5.01	100	101.6	90	110	
U	238	1	nogas	86.671	5.565	2276642	4.77	100	86.7	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	99.928	0.880	1773208	1.73	100	99.9	90	110	
Ba	135	1	nogas	101.512	3.574	148264	4.96	100	101.5	90	110	
Tl	203	1	nogas	100.667	6.368	622572	5.37	100	100.7	90	110	
Na	23	2	He	10650.040	1.428	20692296	1.07	10000	106.5	90	110	
Mg	24	2	He	10678.837	1.709	12007951	1.37	10000	106.8	90	110	
Al	27	2	He	101.624	1.838	77156	1.53	100	101.6	90	110	
K	39	2	He	10607.990	0.538	14153127	0.19	10000	106.1	90	110	
Ca	43	2	He	10409.909	1.991	33504	1.98	10000	104.1	90	110	
Ca	44	2	He	10535.796	1.390	558344	1.48	10000	105.4	90	110	
V	51	2	He	103.465	0.888	546502	0.92	100	103.5	90	110	
Cr	52	2	He	103.762	1.148	568088	0.79	100	103.8	90	110	
Mn	55	2	He	102.637	0.832	489821	0.66	100	102.6	90	110	
Fe	56	2	He	10550.517	1.212	60702189	1.01	10000	105.5	90	110	
Co	59	2	He	103.614	1.312	669198	0.97	100	103.6	90	110	
Ni	60	2	He	103.596	0.786	159226	0.43	100	103.6	90	110	
Cu	63	2	He	103.539	1.028	386724	0.68	100	103.5	90	110	
Zn	66	2	He	105.088	1.364	93873	1.26	100	105.1	90	110	
As	75	2	He	103.314	1.869	71919	1.61	100	103.3	90	110	
Sb	121	2	He	101.287	0.773	356912	0.44	100	101.3	90	110	
Se	78	2	He	105.359	2.480	8688	2.11	100	105.4	90	110	
Ti	47	2	He	104.682	2.301	27315	2.42	100	104.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1285745	3.68	1242233	103.50	70	120	
In	115	1	nogas	1386043	1.46	1329984	104.22	70	120	
Li	6	1	nogas	975518	1.52	1019193	95.71	70	120	
Bi	209	1	nogas	1190456	1.37	1120972	106.20	70	120	
Ge	72	2	He	479889	0.35	464162	103.39	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	281_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:10:05-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.080	5.2	447	5.0	1	
B	11	1	nogas	11.280	11.9	53969	7.8	10	CCB Main CR1 Failed
Al	27	1	nogas	1.122	7.7	46969	1.8	5	
P	31	1	nogas	41.367	21.4	24410	2.4	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.181	34.0	360	18.2	2.5	
Ni	60	1	nogas	0.127	58.5	687	31.1	2.5	
Cu	63	1	nogas	0.016	122.5	2510	5.2	2	
Zn	66	1	nogas	0.275	30.8	1437	11.4	2.5	
Se	77	1	nogas	-27.350	-2.8	2700	2.4	2.5	
Se	82	1	nogas	0.374	88.1	147	25.8	2	
Sr	88	1	nogas	0.084	8.8	1997	5.4	2.5	
Mo	95	1	nogas	0.465	18.2	1947	17.0	2.5	
Ag	107	1	nogas	0.093	18.3	903	14.4	2.5	
Cd	111	1	nogas	0.076	22.3	133	24.1	1	
Sn	118	1	nogas	0.994	6.6	6408	4.9	5	
Sb	121	1	nogas	3.606	10.9	25500	10.3	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.126	34.8	377	31.1	2.5	
Tl	205	1	nogas	0.172	13.7	2674	17.3	1	
Pb	208	1	nogas	0.138	15.6	3700	15.4	2.5	
U	238	1	nogas	0.125	29.6	3217	33.6	2.5	
Na	23	2	He	6.841	6.3	57123	1.4	100	
Mg	24	2	He	6.024	6.3	7255	5.1	100	
Al	27	2	He	1.551	21.8	3004	7.4	5	
K	39	2	He	12.191	13.5	127310	1.1	100	
Ca	43	2	He	15.965	64.4	83	38.6	100	
Ca	44	2	He	13.776	4.0	1513	2.5	100	
V	51	2	He	-0.516	-7.4	3813	5.5	2.5	
Cr	52	2	He	0.253	8.7	12899	1.5	2.5	
Mn	55	2	He	0.085	49.6	850	23.2	2.5	
Fe	56	2	He	8.824	8.0	68728	5.2	100	
Co	59	2	He	0.056	3.3	367	3.1	2.5	
Ni	60	2	He	0.102	43.6	303	22.4	2.5	
Cu	63	2	He	-0.038	-164.4	1187	19.4	2	
Zn	66	2	He	0.275	35.0	640	13.6	2.5	
As	75	2	He	0.032	152.1	306	10.3	2.5	
Sb	121	2	He	2.531	5.4	9186	4.4	2	CCB Main CR1 Failed
Se	78	2	He	0.303	58.9	155	9.7	2	
Ti	47	2	He	0.118	33.0	40	25.0	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1252330	0.22	1242233	100.81	70	120	
In	115	1	nogas	1354158	1.86	1329984	101.82	70	120	
Li	6	1	nogas	1022207	0.28	1019193	100.30	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1144303	3.97	1120972	102.08	70	120	
Ge	72	2	He	466672	0.69	464162	100.54	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	289_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:26:37-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.688	0.059	472603	1.20	100	96.7	90	110	
B	11	1	nogas	506.799	0.218	1492943	1.08	500	101.4	90	110	
Al	27	1	nogas	102.699	0.363	1169638	2.86	100	102.7	90	110	
P	31	1	nogas	540.749	3.863	58080	2.24	500	108.1	90	110	
Ti	47	1	nogas	104.353	0.668	111236	2.94	100	104.4	90	110	
Ni	60	1	nogas	103.440	0.702	296403	2.68	100	103.4	90	110	
Cu	63	1	nogas	103.327	0.855	696858	3.43	100	103.3	90	110	
Zn	66	1	nogas	102.801	0.488	200040	2.58	100	102.8	90	110	
Se	77	1	nogas	97.973	2.246	12659	3.17	100	98.0	90	110	
Se	82	1	nogas	105.080	2.432	11925	4.94	100	105.1	90	110	
Sr	88	1	nogas	93.432	0.125	1741112	2.10	100	93.4	90	110	
Mo	95	1	nogas	102.647	0.824	369420	2.69	100	102.6	90	110	
Ag	107	1	nogas	118.865	1.131	983540	3.00	100	118.9	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	101.462	0.692	175977	2.48	100	101.5	90	110	
Sn	118	1	nogas	101.872	1.514	530673	3.49	100	101.9	90	110	
Sb	121	1	nogas	100.430	0.671	675396	3.27	100	100.4	90	110	
Ba	137	1	nogas	102.510	2.566	253257	4.25	100	102.5	90	110	
Tl	205	1	nogas	97.747	5.787	1489423	4.42	100	97.7	90	110	
Pb	208	1	nogas	102.026	4.978	2015369	3.59	100	102.0	90	110	
U	238	1	nogas	88.053	5.713	2272755	4.39	100	88.1	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.413	0.180	1701852	1.21	100	97.4	90	110	
Ba	135	1	nogas	102.874	0.418	144970	2.40	100	102.9	90	110	
Tl	203	1	nogas	102.180	6.136	620987	4.77	100	102.2	90	110	
Na	23	2	He	10725.851	1.548	20082339	0.63	10000	107.3	90	110	
Mg	24	2	He	10540.028	1.149	11421726	0.25	10000	105.4	90	110	
Al	27	2	He	101.421	1.024	74212	0.34	100	101.4	90	110	
K	39	2	He	10421.455	1.601	13400930	0.79	10000	104.2	90	110	
Ca	43	2	He	10249.047	3.013	31784	1.86	10000	102.5	90	110	
Ca	44	2	He	10453.255	1.035	533870	1.06	10000	104.5	90	110	
V	51	2	He	101.475	1.002	516660	0.96	100	101.5	90	110	
Cr	52	2	He	101.920	1.009	537991	1.46	100	101.9	90	110	
Mn	55	2	He	101.737	1.027	467908	0.69	100	101.7	90	110	
Fe	56	2	He	10517.578	1.674	58316057	1.38	10000	105.2	90	110	
Co	59	2	He	102.284	0.836	636654	0.87	100	102.3	90	110	
Ni	60	2	He	101.678	0.296	150622	1.43	100	101.7	90	110	
Cu	63	2	He	102.879	0.358	370354	1.49	100	102.9	90	110	
Zn	66	2	He	103.287	0.451	88926	0.94	100	103.3	90	110	
As	75	2	He	101.927	1.524	68387	1.77	100	101.9	90	110	
Sb	121	2	He	101.822	1.013	345770	0.40	100	101.8	90	110	
Se	78	2	He	104.354	1.893	8294	0.85	100	104.4	90	110	
Ti	47	2	He	101.581	1.911	25549	3.05	100	101.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1235217	2.61	1242233	99.44	70	120	
In	115	1	nogas	1337666	1.99	1329984	100.58	70	120	
Li	6	1	nogas	959467	1.18	1019193	94.14	70	120	
Bi	209	1	nogas	1169981	1.47	1120972	104.37	70	120	
Ge	72	2	He	462494	1.15	464162	99.64	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	290_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:28:41-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.083	9.8	457	8.1	1	
B	11	1	nogas	22.725	7.8	88009	5.9	10	CCB Main CR1 Failed
Al	27	1	nogas	1.172	11.0	46116	2.9	5	
P	31	1	nogas	36.179	15.6	23338	2.8	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.299	20.5	473	14.4	2.5	
Ni	60	1	nogas	0.115	25.7	633	11.9	2.5	
Cu	63	1	nogas	0.126	18.4	3160	3.8	2	
Zn	66	1	nogas	0.312	28.0	1467	12.5	2.5	
Se	77	1	nogas	-21.758	-14.0	3057	7.0	2.5	
Se	82	1	nogas	0.445	37.2	150	11.5	2	
Sr	88	1	nogas	0.243	10.3	4881	9.3	2.5	
Mo	95	1	nogas	0.670	12.9	2627	12.0	2.5	
Ag	107	1	nogas	0.083	13.3	803	11.6	2.5	
Cd	111	1	nogas	0.070	36.3	120	36.3	1	
Sn	118	1	nogas	1.123	11.7	6922	9.7	5	
Sb	121	1	nogas	3.572	12.9	24495	11.3	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.205	9.3	560	8.2	2.5	
Tl	205	1	nogas	0.221	18.0	3357	20.7	1	
Pb	208	1	nogas	0.167	14.7	4214	14.8	2.5	
U	238	1	nogas	0.132	37.3	3364	41.5	2.5	
Na	23	2	He	98.114	1.1	222896	2.2	100	
Mg	24	2	He	13.229	3.3	14721	4.2	100	
Al	27	2	He	1.500	8.4	2887	4.7	5	
K	39	2	He	11.984	16.8	123527	0.9	100	
Ca	43	2	He	23.377	31.5	103	20.1	100	
Ca	44	2	He	26.645	10.9	2117	8.3	100	
V	51	2	He	-0.486	-9.4	3856	6.1	2.5	
Cr	52	2	He	0.237	25.2	12459	1.0	2.5	
Mn	55	2	He	0.121	21.3	987	10.2	2.5	
Fe	56	2	He	9.302	6.1	69480	6.1	100	
Co	59	2	He	0.078	4.8	490	4.1	2.5	
Ni	60	2	He	0.041	36.8	207	10.1	2.5	
Cu	63	2	He	0.058	28.2	1493	5.7	2	
Zn	66	2	He	0.341	30.0	677	11.1	2.5	
As	75	2	He	0.198	31.0	407	11.3	2.5	
Sb	121	2	He	2.668	4.6	9393	5.9	2	CCB Main CR1 Failed
Se	78	2	He	0.442	75.6	161	17.8	2	
Ti	47	2	He	0.189	88.0	57	73.5	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1215015	1.24	1242233	97.81	70	120	
In	115	1	nogas	1321904	0.39	1329984	99.39	70	120	
Li	6	1	nogas	1005803	1.19	1019193	98.69	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1128652	4.16	1120972	100.69	70	120	
Ge	72	2	He	453819	1.80	464162	97.77	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	296_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:41:10-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.730	0.114	463511	1.42	100	96.7	90	110	
B	11	1	nogas	504.433	0.354	1456914	1.85	500	100.9	90	110	
Al	27	1	nogas	101.417	1.563	1148874	2.12	100	101.4	90	110	
P	31	1	nogas	545.799	3.311	58100	1.42	500	109.2	90	110	
Ti	47	1	nogas	103.003	2.066	109188	3.24	100	103.0	90	110	
Ni	60	1	nogas	103.073	0.966	293731	2.82	100	103.1	90	110	
Cu	63	1	nogas	102.234	0.464	685672	3.06	100	102.2	90	110	
Zn	66	1	nogas	102.598	0.971	198590	3.71	100	102.6	90	110	
Se	77	1	nogas	98.973	9.947	12652	2.70	100	99.0	90	110	
Se	82	1	nogas	100.675	1.484	11368	4.94	100	100.7	90	110	
Sr	88	1	nogas	91.673	0.555	1704841	3.12	100	91.7	90	110	
Mo	95	1	nogas	99.922	1.360	358885	3.69	100	99.9	90	110	
Ag	107	1	nogas	117.500	0.991	970134	3.13	100	117.5	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	101.914	1.859	176429	4.35	100	101.9	90	110	
Sn	118	1	nogas	101.665	1.802	528473	3.98	100	101.7	90	110	
Sb	121	1	nogas	100.972	0.626	675437	4.11	100	101.0	90	110	
Ba	137	1	nogas	101.267	1.269	249640	3.74	100	101.3	90	110	
Tl	205	1	nogas	96.885	5.873	1493132	4.55	100	96.9	90	110	
Pb	208	1	nogas	101.142	5.476	2020692	4.23	100	101.1	90	110	
U	238	1	nogas	86.592	6.016	2260519	4.78	100	86.6	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	98.087	0.130	1679485	1.48	100	98.1	90	110	
Ba	135	1	nogas	101.330	2.684	142536	4.99	100	101.3	90	110	
Tl	203	1	nogas	100.753	5.757	619269	4.08	100	100.8	90	110	
Na	23	2	He	10614.866	0.970	19743943	0.70	10000	106.1	90	110	
Mg	24	2	He	10439.131	0.766	11237850	0.99	10000	104.4	90	110	
Al	27	2	He	99.387	0.761	72279	0.64	100	99.4	90	110	
K	39	2	He	10462.335	1.362	13364489	1.33	10000	104.6	90	110	
Ca	43	2	He	10405.503	1.049	32061	1.34	10000	104.1	90	110	
Ca	44	2	He	10355.930	1.076	525398	1.22	10000	103.6	90	110	
V	51	2	He	101.076	0.620	511229	0.38	100	101.1	90	110	
Cr	52	2	He	101.502	0.317	532253	0.52	100	101.5	90	110	
Mn	55	2	He	101.573	0.515	464062	0.76	100	101.6	90	110	
Fe	56	2	He	10381.835	1.298	57182687	1.26	10000	103.8	90	110	
Co	59	2	He	101.606	0.973	628238	1.08	100	101.6	90	110	
Ni	60	2	He	102.324	1.669	150558	1.54	100	102.3	90	110	
Cu	63	2	He	102.259	0.651	365656	0.33	100	102.3	90	110	
Zn	66	2	He	104.568	1.432	89422	1.11	100	104.6	90	110	
As	75	2	He	101.238	1.023	67474	1.12	100	101.2	90	110	
Sb	121	2	He	102.716	1.298	346493	1.27	100	102.7	90	110	
Se	78	2	He	103.269	2.375	8155	2.29	100	103.3	90	110	
Ti	47	2	He	101.535	2.173	25361	1.85	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1228641	3.49	1242233	98.91	70	120	
In	115	1	nogas	1334831	2.60	1329984	100.36	70	120	
Li	6	1	nogas	940612	1.52	1019193	92.29	70	120	
Bi	209	1	nogas	1183444	2.23	1120972	105.57	70	120	
Ge	72	2	He	459402	0.32	464162	98.97	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	297_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:43:16-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.080	22.6	435	21.5	1	
B	11	1	nogas	24.805	5.8	92902	5.2	10	CCB Main CR1 Failed
Al	27	1	nogas	1.186	2.9	45598	1.6	5	
P	31	1	nogas	49.912	16.7	23902	2.4	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.371	18.9	540	12.8	2.5	
Ni	60	1	nogas	0.122	22.6	643	11.7	2.5	
Cu	63	1	nogas	0.130	21.5	3140	5.1	2	
Zn	66	1	nogas	0.236	38.9	1300	12.7	2.5	
Se	77	1	nogas	-21.470	-9.4	3037	5.9	2.5	
Se	82	1	nogas	0.832	66.5	190	31.6	2	
Sr	88	1	nogas	0.175	8.3	3591	7.2	2.5	
Mo	95	1	nogas	0.608	16.8	2384	15.9	2.5	
Ag	107	1	nogas	0.089	9.8	847	7.6	2.5	
Cd	111	1	nogas	0.063	23.1	107	23.6	1	
Sn	118	1	nogas	1.250	15.6	7502	13.3	5	
Sb	121	1	nogas	3.726	14.8	25139	13.4	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.141	46.2	400	39.7	2.5	
Tl	205	1	nogas	0.185	9.3	2854	9.3	1	
Pb	208	1	nogas	0.178	9.2	4484	9.7	2.5	
U	238	1	nogas	0.122	29.7	3140	34.0	2.5	
Na	23	2	He	103.232	1.5	229964	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	10.246	3.6	11431	3.3	100	
Al	27	2	He	1.716	45.9	3007	18.2	5	
K	39	2	He	14.394	17.5	125311	2.5	100	
Ca	43	2	He	12.554	69.8	70	37.8	100	
Ca	44	2	He	22.788	4.2	1903	2.4	100	
V	51	2	He	-0.433	-0.7	4076	0.3	2.5	
Cr	52	2	He	0.263	32.9	12469	3.4	2.5	
Mn	55	2	He	0.115	9.6	950	5.3	2.5	
Fe	56	2	He	9.022	3.7	67253	2.7	100	
Co	59	2	He	0.055	6.4	347	6.0	2.5	
Ni	60	2	He	0.117	23.9	313	12.9	2.5	
Cu	63	2	He	0.074	29.0	1533	4.8	2	
Zn	66	2	He	0.300	33.8	637	13.2	2.5	
As	75	2	He	0.164	29.8	380	8.5	2.5	
Sb	121	2	He	2.715	7.5	9450	7.1	2	CCB Main CR1 Failed
Se	78	2	He	0.616	21.1	173	5.8	2	
Ti	47	2	He	0.206	34.6	60	28.9	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1197333	0.83	1242233	96.39	70	120	
In	115	1	nogas	1309480	0.83	1329984	98.46	70	120	
Li	6	1	nogas	990010	0.54	1019193	97.14	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1145226	4.30	1120972	102.16	70	120	
Ge	72	2	He	449309	0.13	464162	96.80	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	304_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T22:57:59-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.513	0.930	451534	1.66	100	96.5	90	110	
B	11	1	nogas	508.158	0.169	1432715	0.88	500	101.6	90	110	
Al	27	1	nogas	101.972	1.563	1120137	1.47	100	102.0	90	110	
P	31	1	nogas	513.882	5.497	54250	2.43	500	102.8	90	110	
Ti	47	1	nogas	101.220	0.703	104065	2.21	100	101.2	90	110	
Ni	60	1	nogas	100.407	0.439	277568	3.29	100	100.4	90	110	
Cu	63	1	nogas	100.875	1.169	656357	4.04	100	100.9	90	110	
Zn	66	1	nogas	102.530	1.285	192505	4.12	100	102.5	90	110	
Se	77	1	nogas	151.381	4.826	16309	1.14	100	151.4	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	103.050	1.531	11281	4.27	100	103.1	90	110	
Sr	88	1	nogas	90.933	0.790	1653426	2.97	100	90.9	90	110	
Mo	95	1	nogas	99.234	0.818	348472	3.23	100	99.2	90	110	
Ag	107	1	nogas	116.306	1.434	939051	3.81	100	116.3	90	110	CCV Main CR1-2 Failed
Cd	111	1	nogas	100.174	1.997	169558	4.34	100	100.2	90	110	
Sn	118	1	nogas	100.799	1.598	512350	3.98	100	100.8	90	110	
Sb	121	1	nogas	99.524	1.132	645686	3.96	100	99.5	90	110	
Ba	137	1	nogas	100.255	2.144	241681	4.54	100	100.3	90	110	
Tl	205	1	nogas	95.521	6.231	1451856	4.49	100	95.5	90	110	
Pb	208	1	nogas	100.152	5.823	1973352	4.06	100	100.2	90	110	
U	238	1	nogas	86.743	6.374	2233258	4.64	100	86.7	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	98.175	0.344	1641113	1.02	100	98.2	90	110	
Ba	135	1	nogas	100.728	0.807	138486	2.60	100	100.7	90	110	
Tl	203	1	nogas	99.351	6.455	602288	4.74	100	99.4	90	110	
Na	23	2	He	10873.775	0.389	19483238	0.76	10000	108.7	90	110	
Mg	24	2	He	10613.161	0.496	11006143	0.82	10000	106.1	90	110	
Al	27	2	He	100.220	0.688	70204	1.73	100	100.2	90	110	
K	39	2	He	10464.321	0.114	12877370	1.20	10000	104.6	90	110	
Ca	43	2	He	10242.837	1.031	30404	1.82	10000	102.4	90	110	
Ca	44	2	He	10223.155	0.766	499660	1.28	10000	102.2	90	110	
V	51	2	He	101.858	0.694	496265	1.30	100	101.9	90	110	
Cr	52	2	He	101.754	0.916	513979	1.09	100	101.8	90	110	
Mn	55	2	He	102.092	1.226	449317	1.15	100	102.1	90	110	
Fe	56	2	He	10504.544	1.086	55739858	1.74	10000	105.0	90	110	
Co	59	2	He	101.807	0.908	606378	0.77	100	101.8	90	110	
Ni	60	2	He	101.280	0.299	143563	0.81	100	101.3	90	110	
Cu	63	2	He	102.404	0.760	352747	0.77	100	102.4	90	110	
Zn	66	2	He	101.184	0.338	83372	0.95	100	101.2	90	110	
As	75	2	He	101.285	1.738	65023	0.70	100	101.3	90	110	
Sb	121	2	He	101.656	0.820	330346	0.73	100	101.7	90	110	
Se	78	2	He	102.829	1.611	7823	1.37	100	102.8	90	110	
Ti	47	2	He	103.094	1.837	24807	1.84	100	103.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1191518	2.89	1242233	95.92	70	120	
In	115	1	nogas	1305122	2.42	1329984	98.13	70	120	
Li	6	1	nogas	918324	0.95	1019193	90.10	70	120	
Bi	209	1	nogas	1167346	2.18	1120972	104.14	70	120	
Ge	72	2	He	442569	1.10	464162	95.35	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	305_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:00:06-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.061	8.1	325	6.7	1	
B	11	1	nogas	25.249	6.1	91051	4.4	10	CCB Main CR1 Failed
Al	27	1	nogas	1.059	3.4	42786	0.5	5	
P	31	1	nogas	49.677	5.1	23104	0.8	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.158	60.6	310	30.8	2.5	
Ni	60	1	nogas	0.090	45.8	537	20.1	2.5	
Cu	63	1	nogas	0.064	46.8	2624	6.7	2	
Zn	66	1	nogas	0.165	43.9	1130	11.5	2.5	
Se	77	1	nogas	4.980	25.3	4914	1.4	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.163	87.2	113	13.5	2	
Sr	88	1	nogas	0.187	9.5	3734	7.7	2.5	
Mo	95	1	nogas	0.415	20.5	1670	18.4	2.5	
Ag	107	1	nogas	0.070	4.4	680	4.4	2.5	
Cd	111	1	nogas	0.056	21.9	93	22.3	1	
Sn	118	1	nogas	0.893	10.0	5565	8.7	5	
Sb	121	1	nogas	3.176	16.0	20866	14.8	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.136	21.7	380	18.2	2.5	
Tl	205	1	nogas	0.127	26.4	1977	29.5	1	
Pb	208	1	nogas	0.135	21.5	3614	19.5	2.5	
U	238	1	nogas	0.108	41.4	2764	45.0	2.5	
Na	23	2	He	136.425	2.4	280449	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	9.700	3.5	10490	2.4	100	
Al	27	2	He	1.829	16.7	2980	5.4	5	
K	39	2	He	11.949	26.9	118154	2.2	100	
Ca	43	2	He	16.860	62.0	80	37.5	100	
Ca	44	2	He	24.893	8.8	1940	5.0	100	
V	51	2	He	-0.124	-19.7	5398	2.4	2.5	
Cr	52	2	He	0.150	96.9	11501	5.9	2.5	
Mn	55	2	He	0.147	10.9	1057	7.4	2.5	
Fe	56	2	He	6.988	4.4	54399	1.9	100	
Co	59	2	He	0.030	26.9	190	24.1	2.5	
Ni	60	2	He	0.076	46.6	247	20.4	2.5	
Cu	63	2	He	-0.028	-65.6	1137	6.2	2	
Zn	66	2	He	0.292	26.8	610	11.8	2.5	
As	75	2	He	0.183	6.1	379	2.2	2.5	
Sb	121	2	He	2.207	7.1	7515	6.2	2	CCB Main CR1 Failed
Se	78	2	He	0.404	25.7	151	5.3	2	
Ti	47	2	He	0.117	77.9	37	56.8	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1158106	0.52	1242233	93.23	70	120	
In	115	1	nogas	1281059	0.85	1329984	96.32	70	120	
Li	6	1	nogas	956839	0.72	1019193	93.88	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1129288	4.08	1120972	100.74	70	120	
Ge	72	2	He	434258	1.47	464162	93.56	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	314_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:19:13-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.818	0.137	438983	1.46	100	96.8	90	110	
B	11	1	nogas	498.384	0.768	1362269	2.19	500	99.7	90	110	
Al	27	1	nogas	103.355	1.559	1105167	2.07	100	103.4	90	110	
P	31	1	nogas	596.106	6.646	58060	0.93	500	119.2	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	100.871	1.996	100967	1.83	100	100.9	90	110	
Ni	60	1	nogas	100.804	1.184	271296	2.58	100	100.8	90	110	
Cu	63	1	nogas	100.827	0.970	638847	4.12	100	100.8	90	110	
Zn	66	1	nogas	101.634	0.818	185792	3.44	100	101.6	90	110	
Se	77	1	nogas	150.977	2.908	15855	1.63	100	151.0	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	103.927	4.755	11064	1.41	100	103.9	90	110	
Sr	88	1	nogas	89.652	1.876	1590052	3.35	100	89.7	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.566	1.459	337586	2.96	100	98.6	90	110	
Ag	107	1	nogas	100.684	2.304	792910	3.99	100	100.7	90	110	
Cd	111	1	nogas	100.554	1.774	165984	3.46	100	100.6	90	110	
Sn	118	1	nogas	100.850	2.482	499982	4.23	100	100.8	90	110	
Sb	121	1	nogas	99.453	1.311	628264	3.89	100	99.5	90	110	
Ba	137	1	nogas	100.614	2.409	236542	4.01	100	100.6	90	110	
Tl	205	1	nogas	95.801	5.806	1424945	6.01	100	95.8	90	110	
Pb	208	1	nogas	101.249	4.702	1952155	4.93	100	101.2	90	110	
U	238	1	nogas	87.584	5.724	2206658	5.92	100	87.6	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.874	0.555	1585756	0.92	100	97.9	90	110	
Ba	135	1	nogas	102.348	1.720	137266	3.39	100	102.3	90	110	
Tl	203	1	nogas	100.774	6.173	597838	6.33	100	100.8	90	110	
Na	23	2	He	10537.281	0.752	18578236	2.34	10000	105.4	90	110	
Mg	24	2	He	10329.197	0.661	10538369	1.38	10000	103.3	90	110	
Al	27	2	He	102.304	2.774	70444	1.18	100	102.3	90	110	
K	39	2	He	10070.062	0.818	12194880	1.15	10000	100.7	90	110	
Ca	43	2	He	10004.987	0.685	29218	1.99	10000	100.0	90	110	
Ca	44	2	He	10035.306	0.678	482532	1.00	10000	100.4	90	110	
V	51	2	He	100.884	1.518	483579	1.18	100	100.9	90	110	
Cr	52	2	He	100.324	1.066	498675	0.55	100	100.3	90	110	
Mn	55	2	He	101.375	1.379	438905	0.38	100	101.4	90	110	
Fe	56	2	He	10338.792	0.419	53974653	2.01	10000	103.4	90	110	
Co	59	2	He	101.183	1.441	592864	0.61	100	101.2	90	110	
Ni	60	2	He	101.140	1.209	141036	0.95	100	101.1	90	110	
Cu	63	2	He	102.211	1.086	346367	0.66	100	102.2	90	110	
Zn	66	2	He	103.168	2.299	83613	1.80	100	103.2	90	110	
As	75	2	He	100.250	0.983	63323	0.88	100	100.2	90	110	
Sb	121	2	He	100.413	1.547	320999	0.36	100	100.4	90	110	
Se	78	2	He	101.975	2.545	7633	2.04	100	102.0	90	110	
Ti	47	2	He	98.445	2.815	23301	1.84	100	98.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1160401	3.55	1242233	93.41	70	120	
In	115	1	nogas	1272933	1.76	1329984	95.71	70	120	
Li	6	1	nogas	890018	1.45	1019193	87.33	70	120	
Bi	209	1	nogas	1141349	0.46	1120972	101.82	70	120	
Ge	72	2	He	435412	1.59	464162	93.81	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	315_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:21:22-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.054	2.7	282	2.1	1	
B	11	1	nogas	22.535	5.9	80470	4.3	10	CCB Main CR1 Failed
Al	27	1	nogas	1.064	2.0	41703	1.5	5	
P	31	1	nogas	58.775	4.3	23058	1.5	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.256	28.9	397	17.7	2.5	
Ni	60	1	nogas	0.078	27.8	490	10.8	2.5	
Cu	63	1	nogas	0.020	411.4	2277	20.8	2	
Zn	66	1	nogas	0.252	10.8	1253	2.8	2.5	
Se	77	1	nogas	11.136	28.8	5231	3.8	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.256	149.2	120	33.3	2	
Sr	88	1	nogas	0.095	10.0	2044	7.4	2.5	
Mo	95	1	nogas	0.409	10.5	1607	9.7	2.5	
Ag	107	1	nogas	0.042	63.5	443	47.0	2.5	
Cd	111	1	nogas	0.043	86.3	70	86.9	1	
Sn	118	1	nogas	0.842	6.6	5184	5.9	5	
Sb	121	1	nogas	3.160	15.6	20201	14.0	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.098	31.8	283	26.0	2.5	
Tl	205	1	nogas	0.125	21.3	1944	25.6	1	
Pb	208	1	nogas	0.107	33.6	3067	28.0	2.5	
U	238	1	nogas	0.106	49.3	2694	53.9	2.5	
Na	23	2	He	95.239	0.8	203211	0.9	100	
Mg	24	2	He	5.226	7.5	5798	6.8	100	
Al	27	2	He	1.579	11.2	2747	4.8	5	
K	39	2	He	7.907	29.5	110608	2.5	100	
Ca	43	2	He	10.367	120.5	60	60.1	100	
Ca	44	2	He	19.673	16.4	1650	9.5	100	
V	51	2	He	0.020	270.8	5927	3.2	2.5	
Cr	52	2	He	0.081	122.6	10897	3.5	2.5	
Mn	55	2	He	0.085	23.3	773	11.7	2.5	
Fe	56	2	He	5.297	6.6	44520	4.6	100	
Co	59	2	He	0.021	19.2	137	16.9	2.5	
Ni	60	2	He	0.012	127.8	153	13.6	2.5	
Cu	63	2	He	-0.087	-58.1	917	19.1	2	
Zn	66	2	He	0.202	51.0	523	14.6	2.5	
As	75	2	He	0.170	40.3	362	12.2	2.5	
Sb	121	2	He	2.188	6.6	7279	6.5	2	CCB Main CR1 Failed
Se	78	2	He	0.383	104.5	146	19.0	2	
Ti	47	2	He	0.105	95.3	33	69.3	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1127370	1.04	1242233	90.75	70	120	
In	115	1	nogas	1250668	0.68	1329984	94.04	70	120	
Li	6	1	nogas	925713	0.38	1019193	90.83	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1121458	5.18	1120972	100.04	70	120	
Ge	72	2	He	423780	0.93	464162	91.30	70	120	

Sample Report

Sample Table

Sample Name	LCS-198597
Data File Name	317SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:25:40-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	45.132	45.132	1.44	214540	0.02	2000	
B	11	1	nogas	447.409	447.409	1.23	1283764	0.03	2000	
Al	27	1	nogas	99.731	99.731	1.80	1091230	0.01	2000	
Ti	47	1	nogas	138.375	138.375	1.81	141528	0.10	2000	
Ni	60	1	nogas	48.144	48.144	1.06	132621	0.04	2000	
Cu	63	1	nogas	48.319	48.319	0.58	314106	0.02	2000	
Zn	66	1	nogas	51.088	51.088	1.94	95923	0.05	2000	
Se	77	1	nogas	87.331	87.331	9.09	11328	0.77	2000	
Se	82	1	nogas	53.149	53.149	0.37	5838	0.91	2000	
Sr	88	1	nogas	81.346	81.346	2.65	1483281	0.01	2000	
Mo	95	1	nogas	44.231	44.231	3.38	155891	0.03	2000	
Ag	107	1	nogas	46.118	46.118	4.03	373434	0.01	2000	
Cd	111	1	nogas	47.681	47.681	2.98	80908	0.06	2000	
Sn	118	1	nogas	89.491	89.491	3.36	456193	0.02	2000	
Sb	121	1	nogas	50.020	50.020	0.77	323483	0.02	2000	
Ba	137	1	nogas	46.358	46.358	3.34	112061	0.04	2000	
Tl	205	1	nogas	40.934	40.934	10.01	638824	0.01	2000	
Pb	208	1	nogas	45.112	45.112	8.98	913421	0.00	2000	
U	238	1	nogas	75.622	75.622	9.40	1999179	0.00	2000	
Na	23	2	He	4951.344	4951.344	0.91	8970394	0.06	200000	
Mg	24	2	He	4899.616	4899.616	0.71	5125405	0.10	200000	
Al	27	2	He	98.887	98.887	0.26	69885	0.14	2000	
K	39	2	He	4851.961	4851.961	0.55	6079447	0.08	200000	
Ca	43	2	He	4894.119	4894.119	0.90	14667	33.37	200000	
Ca	44	2	He	4813.470	4813.470	1.51	237657	2.03	200000	
V	51	2	He	46.611	46.611	0.61	232379	0.02	2000	
Cr	52	2	He	46.850	46.850	1.09	244644	0.02	2000	
Mn	55	2	He	47.240	47.240	1.14	209923	0.02	2000	
Fe	56	2	He	4888.389	4888.389	0.85	26169605	0.02	200000	
Co	59	2	He	47.237	47.237	1.87	283743	0.02	2000	
Ni	60	2	He	47.453	47.453	2.88	67903	0.07	2000	
Cu	63	2	He	48.620	48.620	0.72	169593	0.03	2000	
Zn	66	2	He	51.345	51.345	0.84	42862	0.12	2000	
As	75	2	He	48.557	48.557	1.24	31583	0.15	2000	
Sb	121	2	He	50.395	50.395	0.72	165436	0.03	2000	
Se	78	2	He	50.157	50.157	2.21	3913	1.28	2000	
Ti	47	2	He	136.062	136.062	2.50	33013	0.41	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1186136	3.25	1242233	95.48	70	120	
In	115	1	nogas	1308623	1.21	1329984	98.39	70	120	
Li	6	1	nogas	933055	0.91	1019193	91.55	70	120	
Bi	209	1	nogas	1201444	5.04	1120972	107.18	70	120	

Sample Report

Ge	72	2	He	446369	1.34	464162	96.17	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02SD
Data File Name	319SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:29:56-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	0.025	0.126	29.56	148	0.02	2000	
B	11	1	nogas	128.643	643.216	1.48	380765	0.03	2000	
Al	27	1	nogas	6.500	32.498	0.66	97749	0.01	2000	
Ti	47	1	nogas	0.643	3.217	10.21	783	0.08	2000	
Ni	60	1	nogas	0.748	3.738	6.20	2267	0.03	2000	
Cu	63	1	nogas	0.238	1.188	13.72	3661	0.01	2000	
Zn	66	1	nogas	0.922	4.609	6.09	2467	0.04	2000	
Se	77	1	nogas	39.587	197.935	9.69	7392	0.54	2000	
Se	82	1	nogas	0.309	1.544	132.76	127	0.24	2000	
Sr	88	1	nogas	119.819	599.095	2.19	2069400	0.01	2000	
Mo	95	1	nogas	0.214	1.070	25.10	943	0.02	2000	
Ag	107	1	nogas	0.032	0.159	62.69	363	0.01	2000	
Cd	111	1	nogas	0.027	0.135	70.13	43	0.06	2000	
Sn	118	1	nogas	0.519	2.594	7.71	3581	0.01	2000	
Sb	121	1	nogas	0.692	3.462	3.89	5161	0.01	2000	
Ba	137	1	nogas	45.395	226.973	2.82	103950	0.04	2000	
Tl	205	1	nogas	0.066	0.330	16.64	1027	0.01	2000	
Pb	208	1	nogas	0.187	0.936	8.48	4380	0.00	2000	
U	238	1	nogas	0.050	0.249	11.48	1220	0.00	2000	
Na	23	2	He	67408.807	337044.036	1.75	115367978	0.06	200000	
Mg	24	2	He	15631.066	78155.329	2.05	15511014	0.10	200000	
Al	27	2	He	7.055	35.274	6.26	6321	0.11	2000	
K	39	2	He	353.477	1767.384	1.12	514126	0.07	200000	
Ca	43	2	He	18314.350	91571.749	0.71	51996	35.22	200000	
Ca	44	2	He	18404.616	92023.081	1.24	860198	2.14	200000	
V	51	2	He	1.055	5.276	3.19	10694	0.01	2000	
Cr	52	2	He	0.659	3.297	19.37	13630	0.00	2000	
Mn	55	2	He	146.744	733.718	1.03	617857	0.02	2000	
Fe	56	2	He	2225.578	11127.891	0.16	11314767	0.02	200000	
Co	59	2	He	0.100	0.498	2.70	583	0.02	2000	
Ni	60	2	He	0.482	2.409	4.41	790	0.06	2000	
Cu	63	2	He	0.030	0.150	90.62	1300	0.00	2000	
Zn	66	2	He	0.970	4.851	9.20	1127	0.09	2000	
As	75	2	He	5.792	28.962	3.42	3802	0.15	2000	
Sb	121	2	He	0.651	3.257	10.69	2500	0.03	2000	
Se	78	2	He	0.354	1.770	47.72	144	0.25	2000	
Ti	47	2	He	0.569	2.846	35.40	140	0.41	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1141317	1.65	1242233	91.88	70	120	
In	115	1	nogas	1239970	0.71	1329984	93.23	70	120	
Li	6	1	nogas	931386	0.57	1019193	91.38	70	120	
Bi	209	1	nogas	1080402	5.09	1120972	96.38	70	120	

Sample Report

Ge	72	2	He	423518	0.64	464162	91.24	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MS
Data File Name	320SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:32:04-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	49.166	49.166	0.74	223467	0.02	2000	
B	11	1	nogas	943.064	943.064	1.48	2569020	0.04	2000	
Al	27	1	nogas	109.826	109.826	0.10	1157508	0.01	2000	
Ti	47	1	nogas	155.260	155.260	1.65	153403	0.10	2000	
Ni	60	1	nogas	50.672	50.672	0.92	134773	0.04	2000	
Cu	63	1	nogas	49.888	49.888	0.40	313058	0.02	2000	
Zn	66	1	nogas	51.751	51.751	1.13	93789	0.06	2000	
Se	77	1	nogas	120.545	120.545	5.18	13413	0.90	2000	
Se	82	1	nogas	53.231	53.231	2.86	5645	0.94	2000	
Sr	88	1	nogas	829.231	829.231	1.58	14204863	0.01	2000	
Mo	95	1	nogas	49.162	49.162	2.60	162798	0.03	2000	
Ag	107	1	nogas	46.587	46.587	2.74	354496	0.01	2000	
Cd	111	1	nogas	47.975	47.975	2.63	76508	0.06	2000	
Sn	118	1	nogas	95.282	95.282	3.48	456400	0.02	2000	
Sb	121	1	nogas	51.670	51.670	1.13	322636	0.02	2000	
Ba	137	1	nogas	274.088	274.088	2.51	622409	0.04	2000	
Tl	205	1	nogas	46.169	46.169	7.43	627247	0.01	2000	
Pb	208	1	nogas	49.210	49.210	7.67	867040	0.01	2000	
U	238	1	nogas	86.994	86.994	7.78	2001651	0.00	2000	
Na	23	2	He	327954.407	327954.407	0.63	570648831	0.06	200000	>LDR
Mg	24	2	He	80134.170	80134.170	1.11	80865164	0.10	200000	
Al	27	2	He	108.089	108.089	0.27	73542	0.15	2000	
K	39	2	He	7057.010	7057.010	0.98	8484565	0.08	200000	
Ca	43	2	He	95605.031	95605.031	1.23	275899	34.65	200000	
Ca	44	2	He	108932.130	108932.130	1.04	5173714	2.11	200000	
V	51	2	He	52.985	52.985	0.99	254063	0.02	2000	
Cr	52	2	He	50.535	50.535	1.57	253779	0.02	2000	
Mn	55	2	He	741.991	741.991	0.58	3175425	0.02	2000	
Fe	56	2	He	15312.889	15312.889	1.25	79059394	0.02	200000	
Co	59	2	He	48.939	48.939	0.97	283677	0.02	2000	
Ni	60	2	He	49.481	49.481	3.22	68318	0.07	2000	
Cu	63	2	He	48.910	48.910	0.84	164604	0.03	2000	
Zn	66	2	He	51.853	51.853	0.29	41759	0.12	2000	
As	75	2	He	79.061	79.061	0.63	49456	0.16	2000	
Sb	121	2	He	53.243	53.243	1.29	168616	0.03	2000	
Se	78	2	He	52.573	52.573	2.45	3951	1.33	2000	
Ti	47	2	He	149.985	149.985	0.57	35118	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1145304	2.63	1242233	92.20	70	120	
In	115	1	nogas	1229908	0.60	1329984	92.48	70	120	
Li	6	1	nogas	892116	1.19	1019193	87.53	70	120	
Bi	209	1	nogas	1044761	4.34	1120972	93.20	70	120	
Ge	72	2	He	430686	0.85	464162	92.79	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MSD
Data File Name	321SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:34:11-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	52.103	52.103	1.02	238084	0.02	2000	
B	11	1	nogas	1020.147	1020.147	1.92	2792492	0.04	2000	
Al	27	1	nogas	114.945	114.945	0.55	1227008	0.01	2000	
Ti	47	1	nogas	161.836	161.836	0.79	162112	0.10	2000	
Ni	60	1	nogas	54.251	54.251	0.14	146293	0.04	2000	
Cu	63	1	nogas	51.925	51.925	0.55	330332	0.02	2000	
Zn	66	1	nogas	53.740	53.740	1.54	98734	0.05	2000	
Se	77	1	nogas	117.058	117.058	1.98	13330	0.88	2000	
Se	82	1	nogas	54.477	54.477	2.43	5858	0.93	2000	
Sr	88	1	nogas	854.396	854.396	1.49	14804708	0.01	2000	
Mo	95	1	nogas	52.196	52.196	2.90	174842	0.03	2000	
Ag	107	1	nogas	48.154	48.154	1.79	370650	0.01	2000	
Cd	111	1	nogas	51.132	51.132	2.66	82493	0.06	2000	
Sn	118	1	nogas	103.810	103.810	2.13	502917	0.02	2000	
Sb	121	1	nogas	54.812	54.812	1.20	346984	0.02	2000	
Ba	137	1	nogas	286.535	286.535	2.04	658230	0.04	2000	
Tl	205	1	nogas	49.063	49.063	8.62	679150	0.01	2000	
Pb	208	1	nogas	52.171	52.171	8.06	936685	0.01	2000	
U	238	1	nogas	91.758	91.758	7.75	2151845	0.00	2000	
Na	23	2	He	339005.331	339005.331	0.92	590119178	0.06	200000	>LDR
Mg	24	2	He	83961.680	83961.680	0.99	84771342	0.10	200000	
Al	27	2	He	113.404	113.404	0.91	77109	0.15	2000	
K	39	2	He	7364.033	7364.033	1.85	8852111	0.08	200000	
Ca	43	2	He	99524.181	99524.181	1.59	287299	34.64	200000	
Ca	44	2	He	114234.696	114234.696	1.67	5427806	2.10	200000	
V	51	2	He	55.446	55.446	1.29	265687	0.02	2000	
Cr	52	2	He	52.849	52.849	1.30	265035	0.02	2000	
Mn	55	2	He	779.837	779.837	0.69	3338740	0.02	2000	
Fe	56	2	He	15926.391	15926.391	1.18	82257985	0.02	200000	
Co	59	2	He	51.819	51.819	0.69	300501	0.02	2000	
Ni	60	2	He	52.579	52.579	2.62	72615	0.07	2000	
Cu	63	2	He	50.834	50.834	0.65	171092	0.03	2000	
Zn	66	2	He	53.203	53.203	1.26	42852	0.12	2000	
As	75	2	He	83.399	83.399	0.54	52179	0.16	2000	
Sb	121	2	He	54.693	54.693	1.19	173265	0.03	2000	
Se	78	2	He	56.618	56.618	2.20	4248	1.33	2000	
Ti	47	2	He	160.721	160.721	0.60	37647	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1161318	2.49	1242233	93.49	70	120	
In	115	1	nogas	1244207	0.82	1329984	93.55	70	120	
Li	6	1	nogas	896899	0.40	1019193	88.00	70	120	
Bi	209	1	nogas	1064916	4.53	1120972	95.00	70	120	
Ge	72	2	He	430878	1.30	464162	92.83	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02PDS
Data File Name	322SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:36:18-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	102.674	102.674	0.97	476702	0.02	2000	
B	11	1	nogas	497.498	497.498	0.34	1392364	0.04	2000	
Al	27	1	nogas	115.941	115.941	0.79	1222152	0.01	2000	
Ti	47	1	nogas	110.435	110.435	1.50	109278	0.10	2000	
Ni	60	1	nogas	105.996	105.996	0.39	282041	0.04	2000	
Cu	63	1	nogas	103.485	103.485	0.96	648065	0.02	2000	
Zn	66	1	nogas	108.399	108.399	1.59	195830	0.06	2000	
Se	77	1	nogas	160.580	160.580	6.81	16403	0.98	2000	
Se	82	1	nogas	111.906	111.906	4.25	11788	0.95	2000	
Sr	88	1	nogas	688.938	688.938	0.63	11814647	0.01	2000	
Mo	95	1	nogas	105.007	105.007	2.33	347853	0.03	2000	
Ag	107	1	nogas	82.954	82.954	2.67	631836	0.01	2000	
Cd	111	1	nogas	104.308	104.308	3.19	166528	0.06	2000	
Sn	118	1	nogas	1.747	1.747	6.14	9430	0.02	2000	
Sb	121	1	nogas	102.155	102.155	1.41	637936	0.02	2000	
Ba	137	1	nogas	321.590	321.590	2.52	731097	0.04	2000	
Tl	205	1	nogas	100.385	100.385	9.44	1366165	0.01	2000	
Pb	208	1	nogas	105.620	105.620	8.58	1863761	0.01	2000	
U	238	1	nogas	0.284	0.284	17.99	6648	0.00	2000	
Na	23	2	He	324990.071	324990.071	2.11	558114205	0.06	200000	>LDR
Mg	24	2	He	83774.960	83774.960	1.07	83440902	0.10	200000	
Al	27	2	He	117.283	117.283	0.99	78613	0.15	2000	
K	39	2	He	12815.282	12815.282	0.19	15124427	0.08	200000	
Ca	43	2	He	98660.568	98660.568	0.87	281008	35.11	200000	
Ca	44	2	He	112596.084	112596.084	1.62	5278188	2.13	200000	
V	51	2	He	110.753	110.753	0.77	517765	0.02	2000	
Cr	52	2	He	106.907	106.907	2.04	518123	0.02	2000	
Mn	55	2	He	782.493	782.493	0.93	3305082	0.02	2000	
Fe	56	2	He	20745.327	20745.327	0.59	105710632	0.02	200000	
Co	59	2	He	104.514	104.514	0.45	597938	0.02	2000	
Ni	60	2	He	103.948	103.948	0.59	141523	0.07	2000	
Cu	63	2	He	104.264	104.264	0.68	344948	0.03	2000	
Zn	66	2	He	110.046	110.046	1.34	87059	0.13	2000	
As	75	2	He	136.395	136.395	0.75	84024	0.16	2000	
Sb	121	2	He	105.554	105.554	1.01	329447	0.03	2000	
Se	78	2	He	112.910	112.910	3.16	8238	1.37	2000	
Ti	47	2	He	112.059	112.059	2.28	25899	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1146980	2.34	1242233	92.33	70	120	
In	115	1	nogas	1231256	0.88	1329984	92.58	70	120	
Li	6	1	nogas	911331	0.69	1019193	89.42	70	120	
Bi	209	1	nogas	1047567	4.83	1120972	93.45	70	120	
Ge	72	2	He	425086	0.62	464162	91.58	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	323_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:38:27-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.255	0.931	419626	1.62	100	96.3	90	110	
B	11	1	nogas	510.801	1.063	1341971	1.80	500	102.2	90	110	
Al	27	1	nogas	103.615	1.268	1073073	2.46	100	103.6	90	110	
P	31	1	nogas	573.393	0.950	54885	3.89	500	114.7	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	101.244	1.666	98163	2.56	100	101.2	90	110	
Ni	60	1	nogas	101.065	0.843	263469	3.16	100	101.1	90	110	
Cu	63	1	nogas	101.167	0.845	620715	3.52	100	101.2	90	110	
Zn	66	1	nogas	101.894	0.653	180380	2.89	100	101.9	90	110	
Se	77	1	nogas	100.321	3.956	11681	1.79	100	100.3	90	110	
Se	82	1	nogas	105.750	1.843	10911	2.71	100	105.7	90	110	
Sr	88	1	nogas	89.928	1.725	1541341	3.23	100	89.9	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.816	1.854	327100	3.58	100	98.8	90	110	
Ag	107	1	nogas	100.200	1.772	762543	3.52	100	100.2	90	110	
Cd	111	1	nogas	99.976	1.937	159481	3.42	100	100.0	90	110	
Sn	118	1	nogas	100.022	1.850	479147	3.20	100	100.0	90	110	
Sb	121	1	nogas	103.076	0.887	630535	3.24	100	103.1	90	110	
Ba	137	1	nogas	101.495	1.723	230562	3.00	100	101.5	90	110	
Tl	205	1	nogas	95.459	6.012	1363196	3.99	100	95.5	90	110	
Pb	208	1	nogas	100.806	6.569	1865910	4.55	100	100.8	90	110	
U	238	1	nogas	86.720	6.835	2097460	4.82	100	86.7	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.033	0.542	1512172	1.22	100	97.0	90	110	
Ba	135	1	nogas	101.437	2.205	131478	3.77	100	101.4	90	110	
Tl	203	1	nogas	100.273	6.089	571131	4.07	100	100.3	90	110	
Na	23	2	He	10544.881	0.444	17850265	0.83	10000	105.4	90	110	
Mg	24	2	He	10450.870	1.115	10238902	1.71	10000	104.5	90	110	
Al	27	2	He	102.438	1.453	67742	0.82	100	102.4	90	110	
K	39	2	He	10262.617	1.523	11932345	1.72	10000	102.6	90	110	
Ca	43	2	He	10220.737	1.889	28661	2.41	10000	102.2	90	110	
Ca	44	2	He	10094.200	0.080	466073	0.69	10000	100.9	90	110	
V	51	2	He	100.569	0.696	462945	0.71	100	100.6	90	110	
Cr	52	2	He	101.547	0.812	484573	0.25	100	101.5	90	110	
Mn	55	2	He	101.467	0.446	421885	1.02	100	101.5	90	110	
Fe	56	2	He	10254.150	0.659	51400744	1.13	10000	102.5	90	110	
Co	59	2	He	101.611	1.077	571734	0.66	100	101.6	90	110	
Ni	60	2	He	100.035	0.218	133959	0.83	100	100.0	90	110	
Cu	63	2	He	100.739	1.198	327855	1.73	100	100.7	90	110	
Zn	66	2	He	100.294	1.281	78073	1.77	100	100.3	90	110	
As	75	2	He	100.468	0.912	60941	1.33	100	100.5	90	110	
Sb	121	2	He	103.813	0.417	318696	0.93	100	103.8	90	110	
Se	78	2	He	104.994	0.889	7543	0.31	100	105.0	90	110	
Ti	47	2	He	99.999	1.848	22734	2.45	100	100.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1123836	3.49	1242233	90.47	70	120	
In	115	1	nogas	1230161	1.74	1329984	92.49	70	120	
Li	6	1	nogas	855722	0.97	1019193	83.96	70	120	
Bi	209	1	nogas	1096797	2.08	1120972	97.84	70	120	
Ge	72	2	He	418081	0.61	464162	90.07	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	324_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:40:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.061	23.0	310	20.6	1	
B	11	1	nogas	45.501	7.2	142588	5.8	10	CCB Main CR1 Failed
Al	27	1	nogas	0.916	3.9	39748	1.3	5	
P	31	1	nogas	42.174	18.4	21772	1.3	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.323	11.7	457	7.7	2.5	
Ni	60	1	nogas	0.156	5.2	687	2.2	2.5	
Cu	63	1	nogas	0.033	74.5	2334	5.7	2	
Zn	66	1	nogas	0.393	26.5	1487	12.7	2.5	
Se	77	1	nogas	-16.034	-26.8	3217	9.4	2.5	
Se	82	1	nogas	0.501	41.1	143	14.5	2	
Sr	88	1	nogas	0.093	2.5	1957	2.8	2.5	
Mo	95	1	nogas	0.551	7.9	2034	8.1	2.5	
Ag	107	1	nogas	0.069	21.0	637	18.1	2.5	
Cd	111	1	nogas	0.061	57.9	97	58.8	1	
Sn	118	1	nogas	1.185	6.3	6675	5.6	5	
Sb	121	1	nogas	3.941	13.0	24725	12.6	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.096	33.4	270	25.9	2.5	
Tl	205	1	nogas	0.137	11.9	2034	16.0	1	
Pb	208	1	nogas	0.112	20.8	3040	18.8	2.5	
U	238	1	nogas	0.110	26.4	2684	31.6	2.5	
Na	23	2	He	147.893	0.2	283643	1.1	100	CCB Main CR1 Failed
Mg	24	2	He	9.776	5.3	9970	3.7	100	
Al	27	2	He	1.096	9.3	2350	2.4	5	
K	39	2	He	13.344	5.1	113086	0.9	100	
Ca	43	2	He	20.703	102.0	87	67.6	100	
Ca	44	2	He	22.806	9.4	1737	5.9	100	
V	51	2	He	-0.379	-14.4	3953	5.3	2.5	
Cr	52	2	He	0.140	20.6	10807	0.9	2.5	
Mn	55	2	He	0.184	12.6	1150	9.4	2.5	
Fe	56	2	He	8.761	2.6	60045	2.1	100	
Co	59	2	He	0.029	52.4	173	48.0	2.5	
Ni	60	2	He	0.062	81.2	213	30.1	2.5	
Cu	63	2	He	-0.071	-49.9	937	10.7	2	
Zn	66	2	He	0.430	21.4	680	11.5	2.5	
As	75	2	He	0.168	14.3	349	2.8	2.5	
Sb	121	2	He	2.966	1.7	9373	2.4	2	CCB Main CR1 Failed
Se	78	2	He	0.576	66.0	155	17.2	2	
Ti	47	2	He	0.304	68.8	77	61.6	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1114593	0.89	1242233	89.72	70	120	
In	115	1	nogas	1218829	1.10	1329984	91.64	70	120	
Li	6	1	nogas	910721	0.74	1019193	89.36	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1081754	5.35	1120972	96.50	70	120	
Ge	72	2	He	409748	1.30	464162	88.28	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	332_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-04T23:57:58-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.560	1.222	417719	1.68	100	96.6	90	110	
B	11	1	nogas	499.451	2.017	1302453	2.58	500	99.9	90	110	
Al	27	1	nogas	102.499	0.982	1053792	3.07	100	102.5	90	110	
P	31	1	nogas	591.968	3.646	55571	1.65	500	118.4	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	101.558	2.051	97693	1.92	100	101.6	90	110	
Ni	60	1	nogas	100.430	1.157	259788	3.15	100	100.4	90	110	
Cu	63	1	nogas	100.721	0.829	613181	3.27	100	100.7	90	110	
Zn	66	1	nogas	101.653	0.479	178592	3.52	100	101.7	90	110	
Se	77	1	nogas	130.665	2.436	13780	3.23	100	130.7	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	100.284	0.758	10277	4.41	100	100.3	90	110	
Sr	88	1	nogas	87.970	0.809	1519138	3.15	100	88.0	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	97.268	0.667	324385	3.18	100	97.3	90	110	
Ag	107	1	nogas	99.146	1.675	760373	4.51	100	99.1	90	110	
Cd	111	1	nogas	100.535	1.563	161598	3.92	100	100.5	90	110	
Sn	118	1	nogas	98.717	2.489	476710	5.49	100	98.7	90	110	
Sb	121	1	nogas	99.996	0.256	607102	3.85	100	100.0	90	110	
Ba	137	1	nogas	100.079	1.713	229074	3.59	100	100.1	90	110	
Tl	205	1	nogas	94.689	6.561	1391319	4.83	100	94.7	90	110	
Pb	208	1	nogas	100.356	6.391	1911570	4.73	100	100.4	90	110	
U	238	1	nogas	86.381	7.000	2150332	5.92	100	86.4	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	96.776	1.082	1496743	1.56	100	96.8	90	110	
Ba	135	1	nogas	101.315	2.055	132339	4.73	100	101.3	90	110	
Tl	203	1	nogas	98.797	7.349	578843	5.07	100	98.8	90	110	
Na	23	2	He	10362.992	0.739	17766021	0.82	10000	103.6	90	110	
Mg	24	2	He	10182.771	0.585	10102528	0.29	10000	101.8	90	110	
Al	27	2	He	101.295	1.896	67859	1.64	100	101.3	90	110	
K	39	2	He	10142.157	0.544	11943158	0.36	10000	101.4	90	110	
Ca	43	2	He	9941.223	1.045	28230	0.82	10000	99.4	90	110	
Ca	44	2	He	9995.090	0.584	467364	0.37	10000	100.0	90	110	
V	51	2	He	99.885	1.765	465671	1.46	100	99.9	90	110	
Cr	52	2	He	99.236	1.774	479822	1.74	100	99.2	90	110	
Mn	55	2	He	100.173	1.281	421787	0.91	100	100.2	90	110	
Fe	56	2	He	10253.932	0.748	52051294	0.32	10000	102.5	90	110	
Co	59	2	He	99.339	0.783	566068	0.54	100	99.3	90	110	
Ni	60	2	He	99.891	1.155	135466	1.32	100	99.9	90	110	
Cu	63	2	He	100.003	0.762	329588	0.35	100	100.0	90	110	
Zn	66	2	He	100.576	2.211	79282	2.10	100	100.6	90	110	
As	75	2	He	99.635	1.073	61206	1.36	100	99.6	90	110	
Sb	121	2	He	100.333	1.011	311937	0.76	100	100.3	90	110	
Se	78	2	He	102.189	2.988	7438	2.51	100	102.2	90	110	
Ti	47	2	He	98.840	3.018	22754	2.88	100	98.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1115293	3.96	1242233	89.78	70	120	
In	115	1	nogas	1239599	3.03	1329984	93.20	70	120	
Li	6	1	nogas	849137	0.61	1019193	83.31	70	120	
Bi	209	1	nogas	1128881	3.66	1120972	100.71	70	120	
Ge	72	2	He	423398	0.44	464162	91.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	333_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:00:09-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.054	55.0	272	49.4	1	
B	11	1	nogas	27.161	6.5	89690	5.3	10	CCB Main CR1 Failed
Al	27	1	nogas	0.787	1.4	37924	0.7	5	
P	31	1	nogas	68.446	7.9	23064	1.0	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.179	45.6	313	24.0	2.5	
Ni	60	1	nogas	0.054	132.6	417	43.1	2.5	
Cu	63	1	nogas	-0.059	-74.2	1750	14.6	2	
Zn	66	1	nogas	0.274	30.5	1260	11.4	2.5	
Se	77	1	nogas	7.748	13.2	4861	2.0	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.155	138.9	107	19.5	2	
Sr	88	1	nogas	0.084	7.9	1827	5.8	2.5	
Mo	95	1	nogas	0.375	25.9	1477	22.4	2.5	
Ag	107	1	nogas	0.036	13.9	390	8.9	2.5	
Cd	111	1	nogas	0.048	40.7	77	39.8	1	
Sn	118	1	nogas	0.828	13.1	5054	11.1	5	
Sb	121	1	nogas	3.136	18.0	19554	16.6	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.117	34.8	323	29.4	2.5	
Tl	205	1	nogas	0.125	26.9	1917	31.5	1	
Pb	208	1	nogas	0.092	36.9	2740	28.3	2.5	
U	238	1	nogas	0.104	37.8	2624	43.2	2.5	
Na	23	2	He	90.745	1.6	191073	1.0	100	
Mg	24	2	He	3.507	4.9	3997	4.0	100	
Al	27	2	He	1.495	27.3	2630	9.7	5	
K	39	2	He	6.581	15.4	106586	1.6	100	
Ca	43	2	He	8.524	106.6	53	47.2	100	
Ca	44	2	He	18.681	7.1	1567	3.3	100	
V	51	2	He	-0.014	-181.9	5644	1.4	2.5	
Cr	52	2	He	0.029	232.0	10410	2.4	2.5	
Mn	55	2	He	0.103	28.9	827	14.5	2.5	
Fe	56	2	He	5.746	4.7	45733	3.4	100	
Co	59	2	He	0.031	22.8	187	21.7	2.5	
Ni	60	2	He	0.062	59.0	217	22.8	2.5	
Cu	63	2	He	-0.142	-37.8	720	24.1	2	
Zn	66	2	He	0.286	35.4	577	13.5	2.5	
As	75	2	He	0.179	33.6	359	9.4	2.5	
Sb	121	2	He	2.086	6.2	6802	5.7	2	CCB Main CR1 Failed
Se	78	2	He	0.276	24.2	135	3.1	2	
Ti	47	2	He	0.079	142.4	27	94.4	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1099121	0.71	1242233	88.48	70	120	
In	115	1	nogas	1235177	0.92	1329984	92.87	70	120	
Li	6	1	nogas	888290	0.07	1019193	87.16	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1110858	5.56	1120972	99.10	70	120	
Ge	72	2	He	414155	0.68	464162	89.23	70	120	

Sample Report

Sample Table

Sample Name	HS23080102-01
Data File Name	340SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:15:23-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 198597
ISTD Ref FileName	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Be	9	1	nogas	0.025	0.025	17.37	143	0.02	2000	
B	11	1	nogas	55.962	55.962	1.24	171677	0.03	2000	
Al	27	1	nogas	12.707	12.707	1.99	158210	0.01	2000	
Ti	47	1	nogas	1.746	1.746	14.56	1833	0.10	2000	
Ni	60	1	nogas	8.475	8.475	1.34	22287	0.04	2000	
Cu	63	1	nogas	4.062	4.062	1.67	26905	0.02	2000	
Zn	66	1	nogas	11.298	11.298	0.74	20655	0.05	2000	
Se	77	1	nogas	119.377	119.377	3.69	13029	0.92	2000	
Se	82	1	nogas	2.356	2.356	6.39	333	0.71	2000	
Sr	88	1	nogas	825.783	825.783	1.81	13906561	0.01	2000	
Mo	95	1	nogas	1.397	1.397	7.79	4761	0.03	2000	
Ag	107	1	nogas	0.036	0.036	22.44	387	0.01	2000	
Cd	111	1	nogas	0.066	0.066	35.53	103	0.06	2000	
Sn	118	1	nogas	0.109	0.109	25.72	1567	0.01	2000	
Sb	121	1	nogas	0.689	0.689	5.82	5048	0.01	2000	
Ba	137	1	nogas	279.246	279.246	2.32	623317	0.04	2000	
Tl	205	1	nogas	0.005	0.005	110.15	147	0.00	2000	
Pb	208	1	nogas	0.037	0.037	12.44	1573	0.00	2000	
U	238	1	nogas	1.104	1.104	10.35	25050	0.00	2000	
Na	23	2	He	299397.474	299397.474	1.25	501852766	0.06	200000	>LDR
Mg	24	2	He	33042.824	33042.824	1.02	32121534	0.10	200000	
Al	27	2	He	12.540	12.540	6.06	9703	0.13	2000	
K	39	2	He	1264.661	1264.661	0.85	1546102	0.08	200000	
Ca	43	2	He	40220.096	40220.096	1.58	111822	35.97	200000	
Ca	44	2	He	39831.874	39831.874	0.76	1822843	2.19	200000	
V	51	2	He	2.650	2.650	0.94	17668	0.01	2000	
Cr	52	2	He	2.913	2.913	1.54	23793	0.01	2000	
Mn	55	2	He	168.183	168.183	0.58	693628	0.02	2000	
Fe	56	2	He	274.545	274.545	0.74	1382360	0.02	200000	
Co	59	2	He	1.895	1.895	3.73	10597	0.02	2000	
Ni	60	2	He	7.535	7.535	3.83	10137	0.07	2000	
Cu	63	2	He	3.513	3.513	3.09	12482	0.03	2000	
Zn	66	2	He	11.257	11.257	1.75	9013	0.12	2000	
As	75	2	He	1.468	1.468	5.16	1132	0.13	2000	
Sb	121	2	He	0.710	0.710	12.00	2627	0.03	2000	
Se	78	2	He	0.415	0.415	59.43	145	0.29	2000	
Ti	47	2	He	1.497	1.497	24.52	347	0.43	200	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1120306	0.28	1242233	90.18	70	120	
In	115	1	nogas	1209387	1.83	1329984	90.93	70	120	
Li	6	1	nogas	911558	0.88	1019193	89.44	70	120	
Bi	209	1	nogas	1032254	8.15	1120972	92.09	70	120	
Ge	72	2	He	414862	0.40	464162	89.38	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	344_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:24:24-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	95.952	1.858	417908	1.78	100	96.0	90	110	
B	11	1	nogas	486.707	2.185	1278232	2.31	500	97.3	90	110	
Al	27	1	nogas	103.286	0.833	1056501	3.32	100	103.3	90	110	
P	31	1	nogas	566.713	3.202	53754	1.26	500	113.3	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	101.579	1.676	97247	2.50	100	101.6	90	110	
Ni	60	1	nogas	100.929	1.414	259770	2.76	100	100.9	90	110	
Cu	63	1	nogas	100.511	1.125	608963	3.74	100	100.5	90	110	
Zn	66	1	nogas	100.988	2.320	176607	5.06	100	101.0	90	110	
Se	77	1	nogas	149.746	7.066	15065	1.96	100	149.7	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	101.068	1.874	10307	5.11	100	101.1	90	110	
Sr	88	1	nogas	89.666	1.932	1527262	3.32	100	89.7	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.508	2.367	324074	4.19	100	98.5	90	110	
Ag	107	1	nogas	99.899	2.568	755579	4.32	100	99.9	90	110	
Cd	111	1	nogas	99.857	3.842	158337	5.48	100	99.9	90	110	
Sn	118	1	nogas	98.686	2.022	469856	3.71	100	98.7	90	110	
Sb	121	1	nogas	99.352	2.162	600227	4.31	100	99.4	90	110	
Ba	137	1	nogas	100.903	3.352	227849	5.05	100	100.9	90	110	
Tl	205	1	nogas	93.399	7.165	1364816	4.66	100	93.4	90	110	
Pb	208	1	nogas	98.812	6.888	1871810	4.37	100	98.8	90	110	
U	238	1	nogas	85.801	7.658	2123553	5.13	100	85.8	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.287	1.237	1514594	1.40	100	97.3	90	110	
Ba	135	1	nogas	101.807	2.257	131142	4.06	100	101.8	90	110	
Tl	203	1	nogas	97.464	7.319	568061	4.90	100	97.5	90	110	
Na	23	2	He	10574.369	0.279	18014479	1.12	10000	105.7	90	110	
Mg	24	2	He	10386.377	1.990	10241331	2.84	10000	103.9	90	110	
Al	27	2	He	104.071	2.140	69232	1.57	100	104.1	90	110	
K	39	2	He	10409.716	2.294	12177114	1.10	10000	104.1	90	110	
Ca	43	2	He	10088.470	1.489	28467	0.92	10000	100.9	90	110	
Ca	44	2	He	10059.272	1.915	467366	0.81	10000	100.6	90	110	
V	51	2	He	100.773	1.026	466823	0.99	100	100.8	90	110	
Cr	52	2	He	100.221	1.145	481430	0.86	100	100.2	90	110	
Mn	55	2	He	100.228	1.115	419384	1.11	100	100.2	90	110	
Fe	56	2	He	10325.500	0.703	52086024	0.51	10000	103.3	90	110	
Co	59	2	He	100.649	0.815	569929	0.41	100	100.6	90	110	
Ni	60	2	He	99.461	0.932	134037	1.03	100	99.5	90	110	
Cu	63	2	He	100.948	0.645	330628	1.48	100	100.9	90	110	
Zn	66	2	He	102.154	1.250	80017	1.25	100	102.2	90	110	
As	75	2	He	99.504	1.416	60739	0.90	100	99.5	90	110	
Sb	121	2	He	101.024	0.528	312116	0.71	100	101.0	90	110	
Se	78	2	He	100.710	2.264	7286	1.46	100	100.7	90	110	
Ti	47	2	He	99.369	0.031	22734	1.25	100	99.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1109648	3.32	1242233	89.33	70	120	
In	115	1	nogas	1222510	1.92	1329984	91.92	70	120	
Li	6	1	nogas	854950	0.54	1019193	83.88	70	120	
Bi	209	1	nogas	1122791	2.70	1120972	100.16	70	120	
Ge	72	2	He	420759	1.22	464162	90.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	345_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:26:36-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.049	36.9	252	32.2	1	
B	11	1	nogas	18.888	6.3	67862	4.2	10	CCB Main CR1 Failed
Al	27	1	nogas	0.824	11.7	38121	2.8	5	
P	31	1	nogas	47.198	7.0	21676	0.4	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.173	23.4	307	11.5	2.5	
Ni	60	1	nogas	0.071	58.5	457	21.9	2.5	
Cu	63	1	nogas	-0.052	-76.3	1787	12.2	2	
Zn	66	1	nogas	0.239	8.7	1193	3.4	2.5	
Se	77	1	nogas	14.228	27.6	5298	6.2	2.5	CCB Main CR1 Failed
Se	82	1	nogas	0.525	104.1	143	38.4	2	
Sr	88	1	nogas	0.061	12.8	1403	10.0	2.5	
Mo	95	1	nogas	0.365	25.4	1410	22.0	2.5	
Ag	107	1	nogas	0.040	53.0	417	39.0	2.5	
Cd	111	1	nogas	0.064	26.5	100	26.5	1	
Sn	118	1	nogas	0.731	11.4	4487	9.4	5	
Sb	121	1	nogas	2.974	18.4	18499	16.6	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.083	29.2	240	23.2	2.5	
Tl	205	1	nogas	0.123	11.5	1867	16.7	1	
Pb	208	1	nogas	0.081	30.2	2507	23.2	2.5	
U	238	1	nogas	0.097	31.2	2420	36.4	2.5	
Na	23	2	He	88.773	3.1	187644	1.2	100	
Mg	24	2	He	3.800	7.1	4281	6.4	100	
Al	27	2	He	1.563	9.9	2674	5.3	5	
K	39	2	He	4.631	30.5	104291	0.7	100	
Ca	43	2	He	8.622	90.0	53	39.0	100	
Ca	44	2	He	14.049	24.3	1353	10.2	100	
V	51	2	He	0.101	55.8	6154	2.8	2.5	
Cr	52	2	He	0.107	82.9	10764	2.2	2.5	
Mn	55	2	He	0.108	14.6	847	7.9	2.5	
Fe	56	2	He	5.559	11.4	44814	8.7	100	
Co	59	2	He	0.026	21.9	160	21.7	2.5	
Ni	60	2	He	0.053	121.9	203	41.0	2.5	
Cu	63	2	He	-0.146	-12.7	707	8.0	2	
Zn	66	2	He	0.334	8.8	613	5.0	2.5	
As	75	2	He	0.185	11.7	362	2.7	2.5	
Sb	121	2	He	1.890	7.3	6208	8.4	2	
Se	78	2	He	0.315	60.4	138	10.0	2	
Ti	47	2	He	0.211	41.5	57	36.7	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1094045	1.00	1242233	88.07	70	120	
In	115	1	nogas	1208625	0.63	1329984	90.88	70	120	
Li	6	1	nogas	894547	0.58	1019193	87.77	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1099030	5.72	1120972	98.04	70	120	
Ge	72	2	He	413956	1.64	464162	89.18	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	346_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:28:50-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Be	9	1	nogas	96.362	1.406	415581	1.43	100	96.4	90	110	
B	11	1	nogas	491.508	2.013	1278104	2.57	500	98.3	90	110	
Al	27	1	nogas	103.250	1.135	1059319	2.88	100	103.2	90	110	
P	31	1	nogas	577.743	2.513	54604	1.78	500	115.5	90	110	CCV Main CR1-2 Failed
Ti	47	1	nogas	100.736	1.432	96737	2.07	100	100.7	90	110	
Ni	60	1	nogas	100.257	0.704	258855	2.65	100	100.3	90	110	
Cu	63	1	nogas	101.238	0.349	615249	3.53	100	101.2	90	110	
Zn	66	1	nogas	102.287	0.417	179385	3.73	100	102.3	90	110	
Se	77	1	nogas	120.138	5.162	13003	5.31	100	120.1	90	110	CCV Main CR1-2 Failed
Se	82	1	nogas	104.737	0.591	10707	3.54	100	104.7	90	110	
Sr	88	1	nogas	89.130	0.839	1531325	2.87	100	89.1	90	110	CCV Main CR1-2 Failed
Mo	95	1	nogas	98.061	2.069	325402	3.99	100	98.1	90	110	
Ag	107	1	nogas	99.520	1.634	759207	3.60	100	99.5	90	110	
Cd	111	1	nogas	99.894	2.784	159770	4.81	100	99.9	90	110	
Sn	118	1	nogas	99.291	0.853	476796	2.85	100	99.3	90	110	
Sb	121	1	nogas	100.329	1.057	608062	4.23	100	100.3	90	110	
Ba	137	1	nogas	100.877	1.236	229729	3.27	100	100.9	90	110	
Tl	205	1	nogas	94.741	6.586	1379342	4.15	100	94.7	90	110	
Pb	208	1	nogas	99.630	7.212	1880074	4.76	100	99.6	90	110	
U	238	1	nogas	86.061	7.217	2122162	4.80	100	86.1	90	110	CCV Main CR1-2 Failed
Li	7	1	nogas	97.933	1.245	1509257	1.08	100	97.9	90	110	
Ba	135	1	nogas	100.797	0.766	130950	2.79	100	100.8	90	110	
Tl	203	1	nogas	99.081	6.777	575368	4.50	100	99.1	90	110	
Na	23	2	He	10280.499	2.035	17702446	1.45	10000	102.8	90	110	
Mg	24	2	He	10098.505	0.982	10063692	0.80	10000	101.0	90	110	
Al	27	2	He	100.335	1.573	67532	0.95	100	100.3	90	110	
K	39	2	He	10093.335	0.391	11939334	0.34	10000	100.9	90	110	
Ca	43	2	He	9727.510	0.901	27749	1.53	10000	97.3	90	110	
Ca	44	2	He	9927.828	0.555	466315	1.06	10000	99.3	90	110	
V	51	2	He	99.546	0.704	466192	0.10	100	99.5	90	110	
Cr	52	2	He	99.158	0.766	481586	0.25	100	99.2	90	110	
Mn	55	2	He	100.590	0.532	425453	0.94	100	100.6	90	110	
Fe	56	2	He	10208.793	1.096	52054778	1.12	10000	102.1	90	110	
Co	59	2	He	99.902	0.854	571851	1.44	100	99.9	90	110	
Ni	60	2	He	99.134	1.796	135045	2.10	100	99.1	90	110	
Cu	63	2	He	100.456	0.283	332563	0.68	100	100.5	90	110	
Zn	66	2	He	102.979	0.331	81532	0.42	100	103.0	90	110	
As	75	2	He	98.595	0.511	60839	0.54	100	98.6	90	110	
Sb	121	2	He	101.020	0.331	315478	0.33	100	101.0	90	110	
Se	78	2	He	100.880	0.719	7378	1.27	100	100.9	90	110	
Ti	47	2	He	97.444	1.523	22534	1.62	100	97.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1113106	3.33	1242233	89.61	70	120	
In	115	1	nogas	1233142	2.04	1329984	92.72	70	120	
Li	6	1	nogas	846596	1.23	1019193	83.07	70	120	
Bi	209	1	nogas	1118623	3.07	1120972	99.79	70	120	
Ge	72	2	He	425293	0.63	464162	91.63	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	347_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:31:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.050	28.5	253	24.7	1	
B	11	1	nogas	19.949	8.7	70174	6.1	10	CCB Main CR1 Failed
Al	27	1	nogas	0.828	9.6	38064	2.1	5	
P	31	1	nogas	49.271	5.7	21749	1.0	10	CCB Main CR1 Failed
Ti	47	1	nogas	0.177	42.2	310	22.6	2.5	
Ni	60	1	nogas	0.069	95.8	453	37.0	2.5	
Cu	63	1	nogas	-0.056	-20.1	1760	3.5	2	
Zn	66	1	nogas	0.330	8.2	1347	3.3	2.5	
Se	77	1	nogas	2.328	172.2	4444	6.1	2.5	
Se	82	1	nogas	0.430	133.0	133	42.6	2	
Sr	88	1	nogas	0.054	21.5	1297	16.3	2.5	
Mo	95	1	nogas	0.404	27.3	1547	24.2	2.5	
Ag	107	1	nogas	0.034	31.8	373	22.8	2.5	
Cd	111	1	nogas	0.057	72.0	90	72.9	1	
Sn	118	1	nogas	0.853	14.4	5084	12.1	5	
Sb	121	1	nogas	3.292	13.0	20358	12.3	2	CCB Main CR1 Failed
Ba	137	1	nogas	0.089	24.6	253	20.3	2.5	
Tl	205	1	nogas	0.128	8.5	1917	13.7	1	
Pb	208	1	nogas	0.082	32.8	2523	26.2	2.5	
U	238	1	nogas	0.102	40.4	2544	45.8	2.5	
Na	23	2	He	73.753	1.3	161119	0.7	100	
Mg	24	2	He	3.135	11.3	3604	10.2	100	
Al	27	2	He	1.345	30.1	2514	11.5	5	
K	39	2	He	5.770	39.2	104656	1.9	100	
Ca	43	2	He	8.695	21.5	53	10.8	100	
Ca	44	2	He	8.311	11.5	1083	4.7	100	
V	51	2	He	-0.208	-16.8	4724	3.7	2.5	
Cr	52	2	He	0.071	56.6	10504	1.5	2.5	
Mn	55	2	He	0.114	6.5	863	2.4	2.5	
Fe	56	2	He	5.789	9.3	45516	6.3	100	
Co	59	2	He	0.026	11.6	157	9.8	2.5	
Ni	60	2	He	0.046	65.9	193	19.6	2.5	
Cu	63	2	He	-0.105	-23.3	830	10.7	2	
Zn	66	2	He	0.329	32.6	603	13.5	2.5	
As	75	2	He	0.098	20.2	308	3.5	2.5	
Sb	121	2	He	2.267	6.8	7285	6.9	2	CCB Main CR1 Failed
Se	78	2	He	0.431	70.6	145	13.3	2	
Ti	47	2	He	0.065	78.7	23	49.5	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1091376	0.25	1242233	87.86	70	120	
In	115	1	nogas	1214372	0.93	1329984	91.31	70	120	
Li	6	1	nogas	887502	0.86	1019193	87.08	70	120	

Continuing Calibration Blank (CCB) Report

Bi	209	1	nogas	1093319	5.86	1120972	97.53	70	120	
Ge	72	2	He	410290	1.39	464162	88.39	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV2
Data File Name	349LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:35:31-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	1.840	1.700	8392	1.45	2	92.0	70	120	
B	11	1	nogas	22.991	1.300	78828	0.26	10	229.9	70	120	NewName Main CR1 Failed
Al	27	1	nogas	1.779	2.995	47567	1.92	2	88.9	70	120	
P	31	1	nogas	47.976	10.051	21769	1.26	10	479.8	70	120	NewName Main CR1 Failed
Ti	47	1	nogas	1.963	7.715	2000	8.23	2	98.2	70	120	
Ni	60	1	nogas	2.137	4.918	5711	5.76	2	106.9	70	120	
Cu	63	1	nogas	1.889	1.131	13370	2.14	2	94.5	70	120	
Zn	66	1	nogas	2.100	3.696	4397	4.34	2	105.0	70	120	
Se	77	1	nogas	3.364	87.277	4541	6.30	2	168.2	70	120	NewName Main CR1 Failed
Se	82	1	nogas	2.298	42.887	320	30.14	2	114.9	70	120	
Sr	88	1	nogas	1.805	2.195	30799	2.82	2	90.2	70	120	
Mo	95	1	nogas	1.935	4.999	6522	5.23	2	96.8	70	120	
Ag	107	1	nogas	2.015	6.383	15195	6.29	2	100.7	70	120	
Cd	111	1	nogas	1.988	4.425	3120	5.09	2	99.4	70	120	
Sn	118	1	nogas	2.071	4.591	10791	3.92	2	103.5	70	120	
Sb	121	1	nogas	2.288	7.082	14474	7.22	2	114.4	70	120	
Ba	137	1	nogas	2.018	1.779	4564	2.04	2	100.9	70	120	
Tl	205	1	nogas	1.882	7.795	27050	3.70	2	94.1	70	120	
Pb	208	1	nogas	1.991	8.318	37938	3.91	2	99.6	70	120	
Pb	206	1	nogas	1.924	4.282	9243	2.63	2	96.2	70	120	
Pb	207	1	nogas	2.034	10.557	8463	5.87	2	101.7	70	120	
U	238	1	nogas	1.660	8.756	40298	4.54	2	83.0	70	120	
Li	7	1	nogas	1.875	4.267	92512	1.25	2	93.7	70	120	
Ba	135	1	nogas	1.940	7.263	2497	7.28	2	97.0	70	120	
Tl	203	1	nogas	1.975	8.565	11302	4.14	2	98.8	70	120	
Na	23	2	He	256.277	0.609	464590	0.40	200	128.1	70	120	NewName Main CR1 Failed
Mg	24	2	He	191.978	0.674	185514	0.47	200	96.0	70	120	
Al	27	2	He	2.409	22.515	3190	10.62	2	120.5	70	120	NewName Main CR1 Failed
K	39	2	He	183.728	1.903	306625	1.16	200	91.9	70	120	
Ca	43	2	He	201.117	10.035	583	9.44	200	100.6	70	120	
Ca	44	2	He	208.347	2.316	10154	2.39	200	104.2	70	120	
V	51	2	He	1.892	3.354	14122	1.80	2	94.6	70	120	
Cr	52	2	He	2.084	4.280	19773	2.32	2	104.2	70	120	
Mn	55	2	He	1.990	5.530	8529	5.48	2	99.5	70	120	
Fe	56	2	He	183.557	0.613	921510	0.56	200	91.8	70	120	
Co	59	2	He	2.126	3.202	11775	2.95	2	106.3	70	120	
Ni	60	2	He	2.195	2.434	3020	2.07	2	109.8	70	120	
Cu	63	2	He	1.843	3.430	7042	2.98	2	92.1	70	120	
Zn	66	2	He	2.064	11.939	1927	9.66	2	103.2	70	120	
As	75	2	He	1.981	2.831	1427	2.08	2	99.0	70	120	
Se	77	2	He	2.689	35.957	113	18.37	2	134.5	70	120	NewName Main CR1 Failed
Sb	121	2	He	2.430	3.400	7789	3.23	2	121.5	70	120	NewName Main CR1 Failed
Se	78	2	He	2.035	18.871	257	10.17	2	101.8	70	120	
Ti	47	2	He	2.229	16.375	507	15.83	2	111.4	70	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1096433	1.73	1242233	88.26	70	120	
In	115	1	nogas	1210288	0.73	1329984	91.00	70	120	
Li	6	1	nogas	892571	0.77	1019193	87.58	70	120	
Bi	209	1	nogas	1101770	4.74	1120972	98.29	70	120	
Ge	72	2	He	411102	0.26	464162	88.57	70	120	

Low Level Continuing Calibration Verification (LLCCV) Report

Sample Table

Sample Name	LLICV5
Data File Name	350LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:37:46-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	4.549	1.772	20946	1.96	5	91.0	70	130	
B	11	1	nogas	34.624	0.767	111578	0.61	25	138.5	70	130	NewName Main CR1 Failed
Al	27	1	nogas	4.770	2.430	77629	2.19	5	95.4	70	130	
P	31	1	nogas	87.141	25.480	24362	6.21	25	348.6	70	130	NewName Main CR1 Failed
Ti	47	1	nogas	5.016	4.373	4928	4.50	5	100.3	70	130	
Ni	60	1	nogas	4.948	1.180	12966	1.14	5	99.0	70	130	
Cu	63	1	nogas	4.927	2.507	31781	3.11	5	98.5	70	130	
Zn	66	1	nogas	5.035	4.035	9530	3.91	5	100.7	70	130	
Se	77	1	nogas	10.495	24.758	5088	2.85	5	209.9	70	130	NewName Main CR1 Failed
Se	82	1	nogas	5.412	17.109	637	14.08	5	108.2	70	130	
Sr	88	1	nogas	4.455	2.939	76106	2.80	5	89.1	70	130	
Mo	95	1	nogas	4.893	2.007	16286	2.59	5	97.9	70	130	
Ag	107	1	nogas	4.966	1.383	37606	1.35	5	99.3	70	130	
Cd	111	1	nogas	4.890	3.833	7742	4.97	5	97.8	70	130	
Sn	118	1	nogas	4.867	3.110	24144	3.21	5	97.3	70	130	
Sb	121	1	nogas	5.050	1.465	31214	2.26	5	101.0	70	130	
Ba	137	1	nogas	4.920	1.773	11141	2.11	5	98.4	70	130	
Tl	205	1	nogas	4.681	9.884	67138	3.73	5	93.6	70	130	
Pb	208	1	nogas	4.849	8.973	91037	3.23	5	97.0	70	130	
U	238	1	nogas	4.174	7.820	101410	1.58	5	83.5	70	130	
Li	7	1	nogas	4.542	2.374	135643	1.06	5	90.8	70	130	
Na	23	2	He	528.036	0.953	931118	0.33	500	105.6	70	130	
Mg	24	2	He	466.104	0.410	457033	0.34	500	93.2	70	130	
Al	27	2	He	4.928	4.530	4868	2.89	5	98.6	70	130	
K	39	2	He	449.696	0.500	618254	0.61	500	89.9	70	130	
Ca	43	2	He	516.863	7.744	1477	7.05	500	103.4	70	130	
Ca	44	2	He	518.020	3.498	24590	2.93	500	103.6	70	130	
V	51	2	He	4.953	1.450	28263	0.57	5	99.1	70	130	
Cr	52	2	He	5.055	3.165	33965	1.69	5	101.1	70	130	
Mn	55	2	He	5.211	0.993	22046	0.41	5	104.2	70	130	
Fe	56	2	He	444.887	0.779	2245802	0.59	500	89.0	70	130	
Co	59	2	He	5.083	3.457	28604	2.91	5	101.7	70	130	
Ni	60	2	He	5.155	6.995	7028	6.71	5	103.1	70	130	
Cu	63	2	He	5.113	1.465	17757	1.42	5	102.3	70	130	
Zn	66	2	He	5.009	8.592	4241	8.35	5	100.2	70	130	
As	75	2	He	4.689	3.208	3086	3.43	5	93.8	70	130	
Sb	121	2	He	5.134	1.925	16203	1.60	5	102.7	70	130	
Se	78	2	He	5.339	10.312	495	8.43	5	106.8	70	130	
Ti	47	2	He	5.262	19.715	1203	19.07	5	105.2	70	130	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1106309	0.84	1242233	89.06	70	120	
In	115	1	nogas	1220757	1.34	1329984	91.79	70	120	
Li	6	1	nogas	902654	0.22	1019193	88.57	70	120	
Bi	209	1	nogas	1103950	6.54	1120972	98.48	70	120	
Ge	72	2	He	417931	0.59	464162	90.04	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	351ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:40:00-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Be	9	1	nogas	0.013	27.4	80	18.8	0	ICSA Main CR1 Failed
B	11	1	nogas	15.050	4.7	52704	2.8	0	ICSA Main CR1 Failed
Al	27	1	nogas	115422.002	0.8	1074781131	0.8	0	
P	31	1	nogas	1007988.056	0.6	57839112	1.0	0	
Ti	47	1	nogas	2119.775	1.1	1900103	1.9	0	
Ni	60	1	nogas	1.476	11.9	3824	11.3	0	ICSA Main CR1 Failed
Cu	63	1	nogas	0.594	3.4	5354	1.3	0	ICSA Main CR1 Failed
Zn	66	1	nogas	3.469	2.5	6405	2.8	0	ICSA Main CR1 Failed
Se	77	1	nogas	9.947	9.8	4748	1.7	0	
Se	82	1	nogas	0.531	22.4	137	8.4	0	ICSA Main CR1 Failed
Sr	88	1	nogas	4.198	2.1	64722	1.7	0	ICSA Main CR1 Failed
Mo	95	1	nogas	2424.089	1.4	7176886	0.5	0	
Ag	107	1	nogas	0.163	2.4	1217	2.1	0	ICSA Main CR1 Failed
Cd	111	1	nogas	2.653	8.6	3787	8.5	0	
Sn	118	1	nogas	0.230	16.9	1944	9.2	0	ICSA Main CR1 Failed
Sb	121	1	nogas	0.736	4.2	4948	2.8	0	ICSA Main CR1 Failed
Ba	137	1	nogas	0.691	10.4	1453	9.5	0	ICSA Main CR1 Failed
Tl	205	1	nogas	0.033	13.9	503	11.3	0	ICSA Main CR1 Failed
Pb	208	1	nogas	0.175	6.4	3764	1.2	0	ICSA Main CR1 Failed
Na	23	2	He	109729.930	0.9	170642424	0.9	0	
Mg	24	2	He	109914.027	0.8	99123455	1.6	0	
Al	27	2	He	117228.559	0.9	69584337	0.5	0	
K	39	2	He	107759.377	0.6	114464438	1.4	0	
Ca	43	2	He	98916.283	0.7	255076	0.7	0	
Ca	44	2	He	118760.282	0.2	5040584	0.9	0	
V	51	2	He	-0.158	-29.3	4639	3.3	0	ICSA Main CR1 Failed
Cr	52	2	He	1.559	5.0	16249	1.5	0	ICSA Main CR1 Failed
Mn	55	2	He	0.827	4.0	3537	3.1	0	ICSA Main CR1 Failed
Fe	56	2	He	107172.077	1.1	494344966	0.4	0	
Co	59	2	He	0.532	3.4	2770	2.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.969	11.6	1317	9.9	0	ICSA Main CR1 Failed
Cu	63	2	He	0.179	19.2	1627	6.6	0	ICSA Main CR1 Failed
Zn	66	2	He	2.539	6.9	2144	6.6	0	ICSA Main CR1 Failed
As	75	2	He	0.398	20.0	456	9.8	0	ICSA Main CR1 Failed
Sb	121	2	He	0.641	12.0	2244	9.5	0	ICSA Main CR1 Failed
Se	78	2	He	0.095	242.9	114	13.7	0	ICSA Main CR1 Failed
Ti	47	2	He	2100.995	0.6	439491	0.9	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1040131	0.83	1242233	83.73	70	120	
In	115	1	nogas	1101325	0.92	1329984	82.81	70	120	
Li	6	1	nogas	820654	0.59	1019193	80.52	70	120	
Bi	209	1	nogas	979808	5.50	1120972	87.41	70	120	
Ge	72	2	He	384862	0.86	464162	82.92	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	352ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq Date Time	2023-08-05T00:42:13-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	267CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Be	9	1	nogas	95.619	0.016	386044	1.75	100	95.6	80	120	
B	11	1	nogas	492.976	0.843	1199975	2.30	100	493.0	80	120	
Al	27	1	nogas	110602.246	3.069	1058555504	0.47	100	110602.2	80	120	ICSB Main CR1 Failed
Ti	47	1	nogas	2206.329	0.426	2033854	3.22	100	2206.3	80	120	
Ni	60	1	nogas	94.526	0.771	234610	3.49	100	94.5	80	120	
Cu	63	1	nogas	92.598	0.518	541031	3.69	100	92.6	80	120	
Zn	66	1	nogas	98.528	1.078	166046	2.51	100	98.5	80	120	
Se	77	1	nogas	131.643	4.040	13293	5.29	100	131.6	80	120	ICSB Main CR1 Failed
Se	82	1	nogas	103.736	3.387	10200	6.68	100	103.7	80	120	
Sr	88	1	nogas	95.436	1.559	1501900	3.83	100	95.4	80	120	
Mo	95	1	nogas	2474.095	1.850	7510318	0.64	100	2474.1	80	120	ICSB Main CR1 Failed
Ag	107	1	nogas	94.977	1.835	663658	4.12	100	95.0	80	120	
Cd	111	1	nogas	101.820	1.785	149137	4.07	100	101.8	80	120	
Sn	118	1	nogas	101.927	1.755	448317	3.95	100	101.9	80	120	
Sb	121	1	nogas	105.841	1.141	616407	4.01	100	105.8	80	120	
Ba	137	1	nogas	104.547	2.079	218065	3.91	100	104.5	80	120	
Tl	205	1	nogas	94.001	6.416	1240346	5.34	100	94.0	80	120	
Pb	208	1	nogas	100.124	6.072	1712538	4.86	100	100.1	80	120	
U	238	1	nogas	89.071	6.380	1990722	5.19	100	89.1	80	120	
Na	23	2	He	113431.140	0.901	184856664	1.03	100	113431.1	80	120	ICSB Main CR1 Failed
Mg	24	2	He	112893.374	0.904	106683622	0.78	100	112893.4	80	120	ICSB Main CR1 Failed
Al	27	2	He	109606.195	0.635	68181057	0.74	100	109606.2	80	120	ICSB Main CR1 Failed
K	39	2	He	110901.876	0.256	123440775	0.10	100	110901.9	80	120	ICSB Main CR1 Failed
Ca	43	2	He	106509.249	0.478	287826	0.61	100	106509.2	80	120	ICSB Main CR1 Failed
Ca	44	2	He	122447.254	1.391	5446121	1.42	100	122447.3	80	120	ICSB Main CR1 Failed
V	51	2	He	98.876	0.344	439166	0.50	100	98.9	80	120	
Cr	52	2	He	98.708	0.625	454679	0.76	100	98.7	80	120	
Mn	55	2	He	98.056	0.297	393300	0.32	100	98.1	80	120	
Fe	56	2	He	111920.838	0.489	541018125	0.33	100	111920.8	80	120	ICSB Main CR1 Failed
Co	59	2	He	97.907	1.478	531443	1.46	100	97.9	80	120	
Ni	60	2	He	95.138	0.947	122903	0.86	100	95.1	80	120	
Cu	63	2	He	95.404	0.680	299567	0.63	100	95.4	80	120	
Zn	66	2	He	101.676	1.693	76344	1.78	100	101.7	80	120	
As	75	2	He	101.228	1.316	59229	1.46	100	101.2	80	120	
Sb	121	2	He	106.119	1.543	314253	1.70	100	106.1	80	120	
Se	78	2	He	102.603	0.670	7114	0.50	100	102.6	80	120	
Ti	47	2	He	2146.047	0.785	470435	0.92	100	2146.0	80	120	ICSB Main CR1 Failed

QC ISTD Table

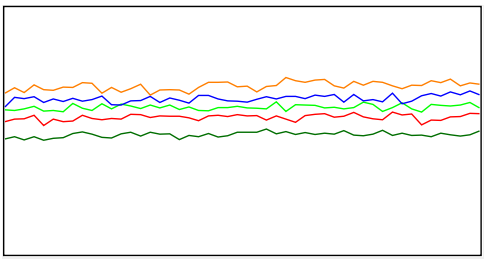
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Ge	72	1	nogas	1069812	3.51	1242233	86.12	70	120	
In	115	1	nogas	1129414	2.29	1329984	84.92	70	120	
Li	6	1	nogas	792496	1.74	1019193	77.76	70	120	
Bi	209	1	nogas	1013234	2.37	1120972	90.39	70	120	
Ge	72	2	He	403306	0.16	464162	86.89	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\080423A.b
Acq. Date-Time	8/4/2023 9:35:59 AM
Report Comment	---
Instrument Name	G3281A JP11080910

[nogas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	10000	5549	55494.96		
24	20000	11919	119194.49		
59	20000	12623	126234.55		
115	20000	13648	136483.65		
208	20000	9695	96952.67		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.203	5.000	
24	1.860	5.000	
59	2.281	5.000	
115	2.538	5.000	
208	2.139	5.000	

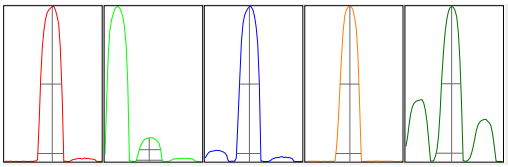
Mass	Background	Background (Required)	Background (Flag)
9	0.100		
24	0.200		
59	0.500		
115	1.400		
208	1.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.863 %
Doubly Charged	70 / 140 1.590 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	5592.48	9.00	8.90 - 9.10	
24	12120.17	23.90	23.90 - 24.10	
59	13071.82	58.90	58.90 - 59.10	
115	14085.53	114.90	114.90 - 115.10	
208	9992.10	207.95	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.786		
24	0.65	0.785		
59	0.61	0.739		
115	0.58	0.772		
208	0.58	0.819		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.45 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	---
RF Matching	1.70 V	Nebulizer Pump	0.10 rps	Plasma Gas	---
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.0 V	Deflect	14.0 V
Extract 2	-190.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	127	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.5 mm

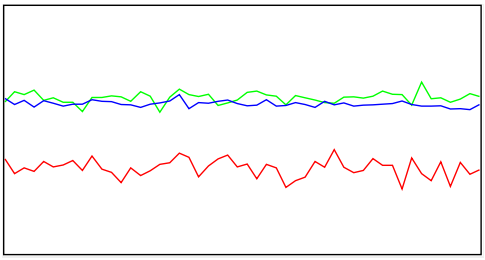
EM

Discriminator	4.5 mV	Analog HV	1598 V	Pulse HV	1301 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

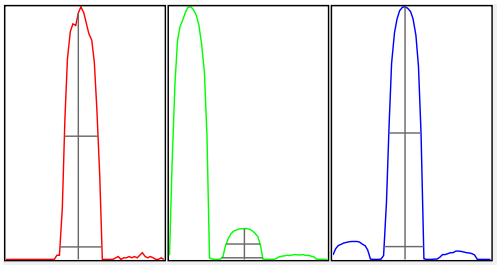
Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	500	172	1724.30		
24	2000	1261	12613.52		
59	10000	6055	60546.15		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	10.456	5.000	Fail
24	3.462	5.000	
59	1.960	5.000	

Mass	Background	Background (Required)	Background (Flag)
9			
24			
59			

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	177.27	8.90	8.90 - 9.10	
24	1254.31	23.95	23.90 - 24.10	
59	6162.49	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.784		
24	0.63	0.769		
59	0.60	0.737		

Tune Parameters

Plasma Parameters

Tune Check Report

Plasma Mode	---	Nebulizer Gas	0.45 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	---
RF Matching	1.70 V	Nebulizer Pump	0.10 rps	Plasma Gas	---
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.0 V	Deflect	0.4 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.4 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	127	Axis Offset	0.04		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	-0.5 mm		

EM

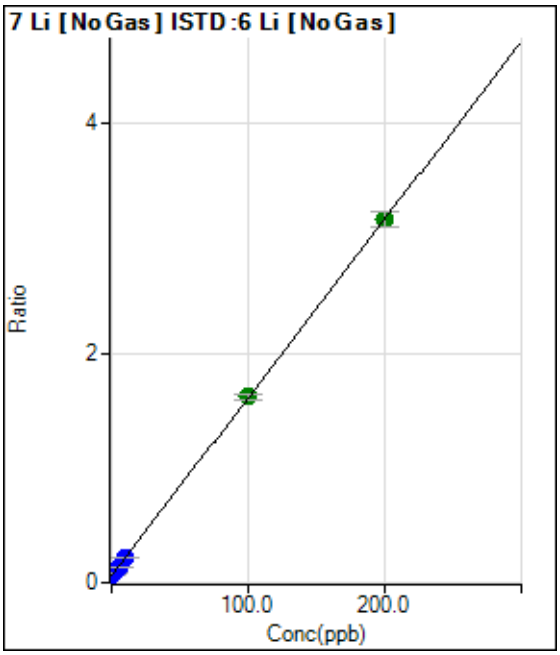
Discriminator	4.5 mV	Analog HV	1598 V	Pulse HV	1301 V

Calibration for 192_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080723A.b\
Analysis File: 080723A.batch.bin
DA Date-Time: 8/7/2023 10:09:58 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	185CALB.d	CAL BLK	8/7/2023 7:35:40 PM
2	186CALS.d	2/10/200	8/7/2023 7:37:38 PM
3	187CALS.d	5/25/500	8/7/2023 7:39:34 PM
4	188CALS.d	10/50/100	8/7/2023 7:41:31 PM
5	189CALS.d	100/500/10K	8/7/2023 7:43:27 PM
6	190CALS.d	200/1000/20K	8/7/2023 7:45:40 PM

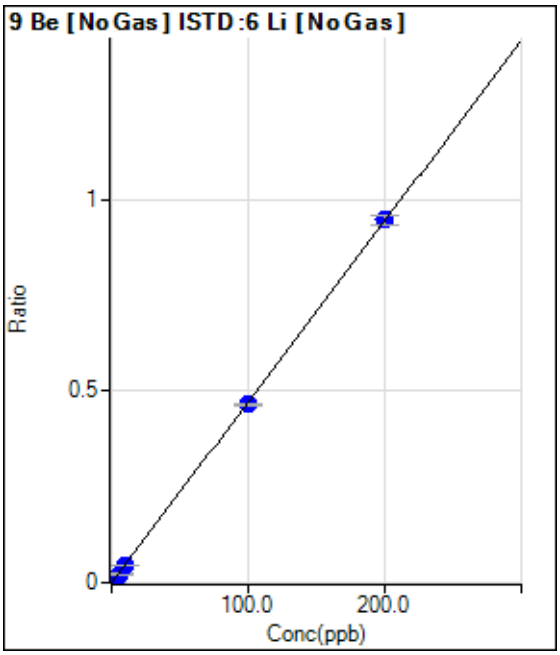
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33324.52	0.0601	P	0.8
2	☐	2.000	1.851	49043.60	0.0888	P	1.2
3	☐	5.000	4.782	73985.21	0.1343	P	1.9
4	☐	10.000	10.134	116537.04	0.2173	P	1.4
5	☐	100.000	100.399	841168.56	1.6177	A	2.9
6	☐	200.000	199.801	1569865.76	3.1597	A	4.1

y = 0.0155 * x + 0.0601
R = 1.0000
DL = 0.09653
BEC = 3.874

Weight: <None>
Min Conc: <None>

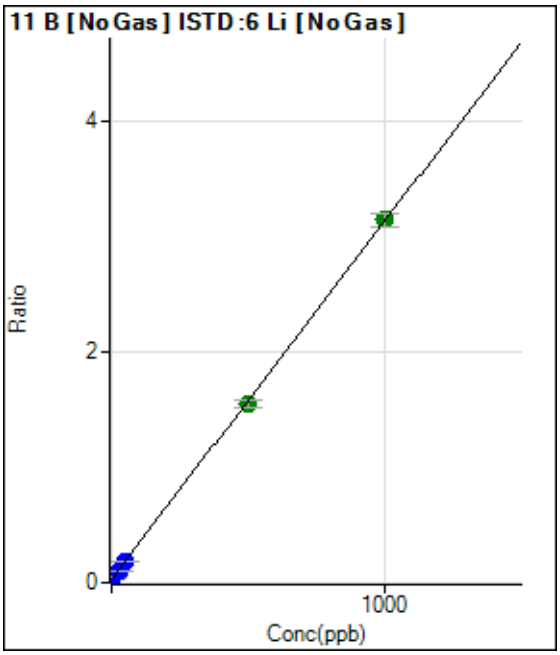


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21.67	0.0000	P	57.7
2	☐	2.000	1.975	5169.32	0.0094	P	1.1
3	☐	5.000	4.778	12445.60	0.0226	P	2.7
4	☐	10.000	9.691	24549.85	0.0458	P	2.1
5	☐	100.000	98.555	241927.36	0.4652	P	1.3
6	☐	200.000	200.744	470829.78	0.9475	P	2.3

y = 0.0047 * x + 3.8978E-005
R = 1.0000
DL = 0.0143
BEC = 0.008258

Weight: <None>
Min Conc: <None>

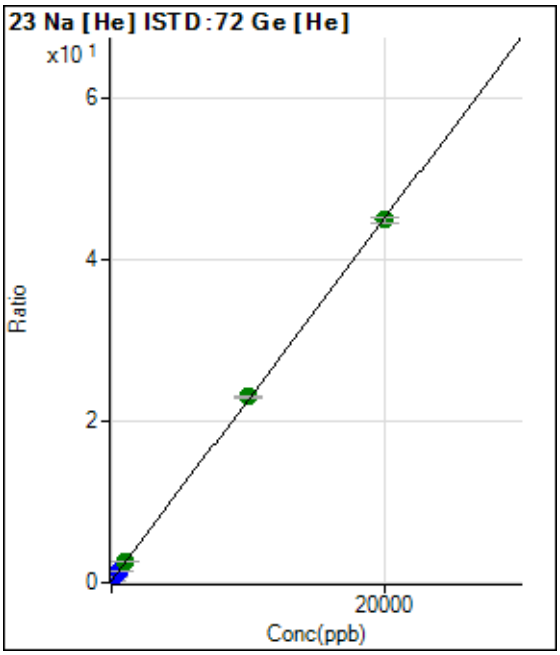
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16458.11	0.0297	P	1.8
2	☐	10.000	9.454	32561.09	0.0590	P	2.9
3	☐	25.000	23.062	55735.64	0.1012	P	2.5
4	☐	50.000	48.097	95858.36	0.1787	P	1.2
5	☐	500.000	491.927	808261.76	1.5543	A	4.4
6	☐	1000.000	1004.186	1560887.79	3.1420	A	3.6

y = 0.0031 * x + 0.0297
R = 1.0000
DL = 0.5177
BEC = 9.576

Weight: <None>
Min Conc: <None>

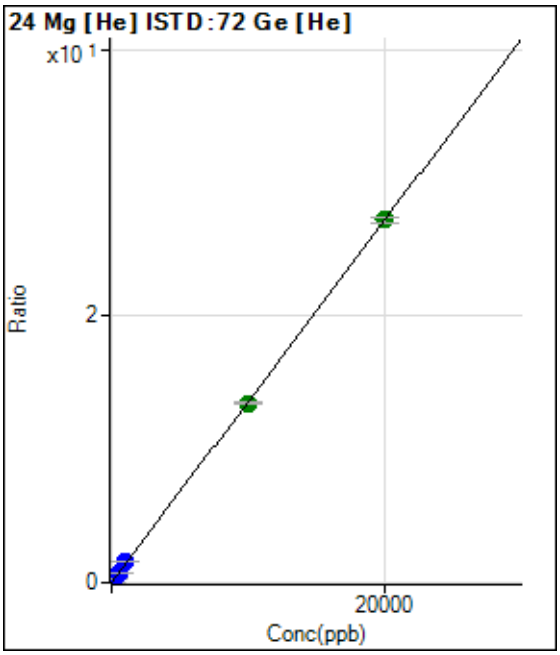


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102678.74	0.2362	P	1.1
2	☐	200.000	216.346	314737.28	0.7211	P	1.4
3	☐	500.000	539.938	625217.69	1.4464	P	1.5
4	☐	1000.000	1068.390	1126311.80	2.6308	A	0.4
5	☐	10000.000	10140.443	9779896.73	22.9642	A	0.8
6	☐	20000.000	19925.197	18731648.89	44.8949	A	1.9

y = 0.0022 * x + 0.2362
R = 1.0000
DL = 3.474
BEC = 105.4

Weight: <None>
Min Conc: <None>

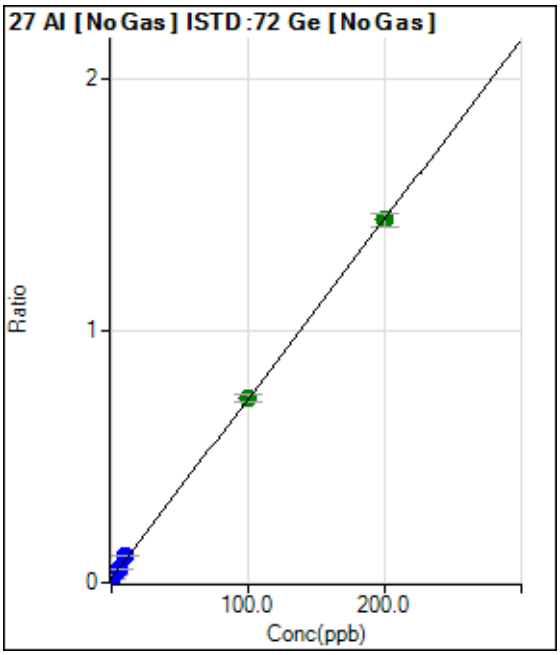
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1320.09	0.0030	P	4.9
2	☐	200.000	225.299	134892.26	0.3091	P	1.3
3	☐	500.000	553.914	326548.47	0.7555	P	1.9
4	☐	1000.000	1133.552	660527.10	1.5429	P	0.7
5	☐	10000.000	9920.432	5740332.00	13.4790	A	2.0
6	☐	20000.000	20031.505	11354204.83	27.2138	A	1.8

y = 0.0014 * x + 0.0030
R = 1.0000
DL = 0.3278
BEC = 2.236

Weight: <None>
Min Conc: <None>

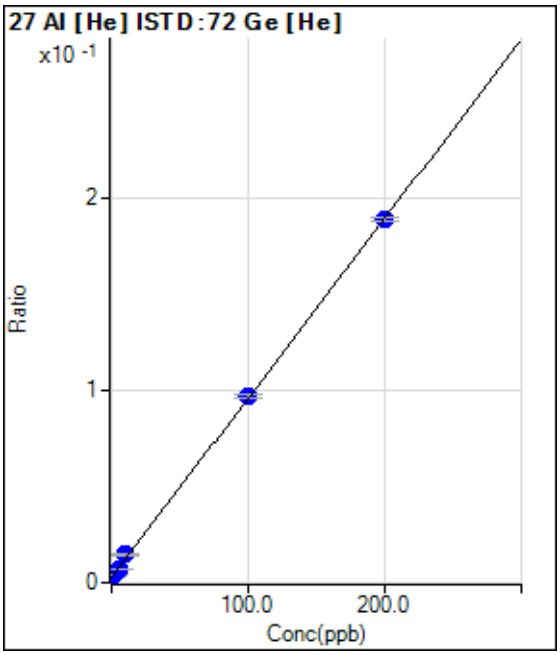


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25911.23	0.0169	P	4.0
2	☐	2.000	2.044	48610.30	0.0314	P	3.3
3	☐	5.000	4.775	79313.71	0.0509	P	2.0
4	☐	10.000	12.405	162108.99	0.1052	P	2.5
5	☐	100.000	100.581	1110941.52	0.7333	A	3.9
6	☐	200.000	199.594	2153042.10	1.4385	A	4.0

y = 0.0071 * x + 0.0169
R = 0.9999
DL = 0.2816
BEC = 2.369

Weight: <None>
Min Conc: <None>

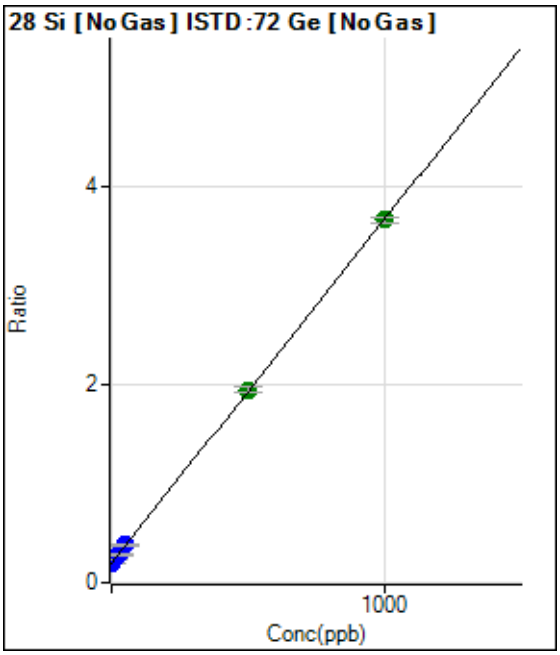
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1176.74	0.0027	P	13.0
2	☐	2.000	1.707	1876.82	0.0043	P	3.4
3	☐	5.000	4.502	2987.04	0.0069	P	3.4
4	☐	10.000	12.894	6308.25	0.0147	P	3.9
5	☐	100.000	100.951	41268.35	0.0969	P	2.6
6	☐	200.000	199.395	78766.25	0.1888	P	1.2

y = 9.3308E-004 * x + 0.0027
R = 0.9999
DL = 1.134
BEC = 2.901

Weight: <None>
Min Conc: <None>

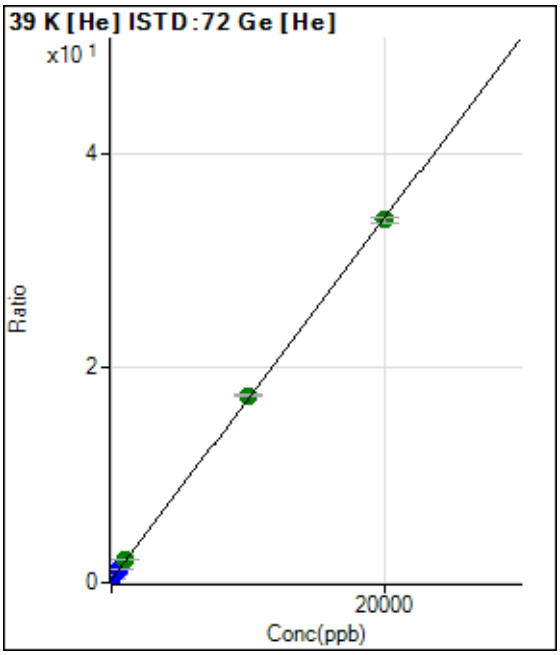


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	304063.85	0.1980	P	3.6
2	☐	10.000	10.462	362136.44	0.2343	P	0.8
3	☐	25.000	24.471	440752.31	0.2828	P	2.2
4	☐	50.000	52.009	582693.36	0.3782	P	1.3
5	☐	500.000	503.460	2942972.35	1.9422	A	2.8
6	☐	1000.000	998.178	5473950.96	3.6561	A	1.7

y = 0.0035 * x + 0.1980
R = 1.0000
DL = 6.089
BEC = 57.16

Weight: <None>
Min Conc: <None>

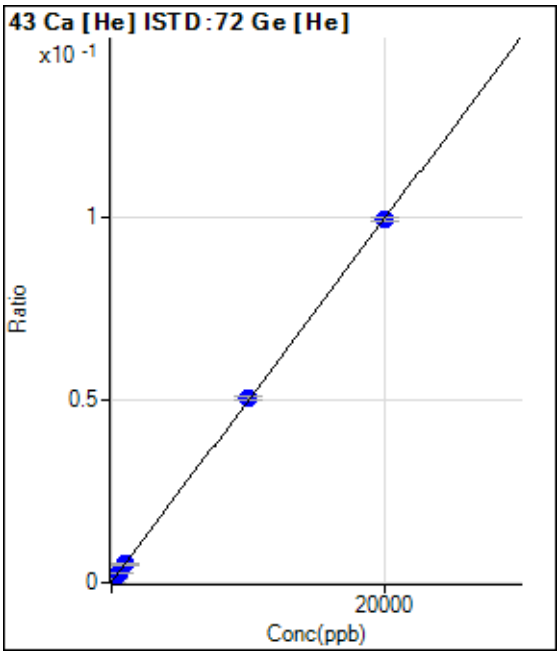
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	137849.07	0.3171	P	0.2
2	☐	200.000	212.671	294558.02	0.6749	P	1.4
3	☐	500.000	530.065	522568.96	1.2089	P	1.4
4	☐	1000.000	1080.622	913889.67	2.1352	A	3.6
5	☐	10000.000	10162.232	7416377.39	17.4143	A	0.9
6	☐	20000.000	19913.975	14110901.04	33.8208	A	1.7

y = 0.0017 * x + 0.3171
R = 1.0000
DL = 1.329
BEC = 188.5

Weight: <None>
Min Conc: <None>

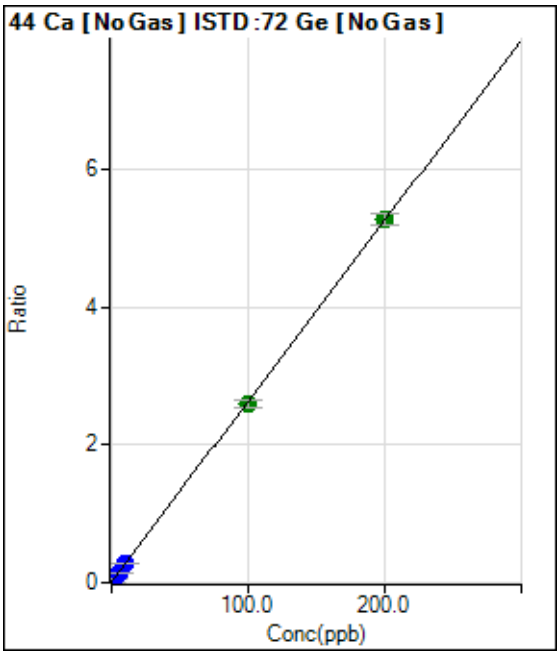


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	40.00	0.0001	P	0.8
2	☐	200.000	163.956	396.68	0.0009	P	15.3
3	☐	500.000	504.744	1126.73	0.0026	P	9.3
4	☐	1000.000	1035.236	2246.89	0.0052	P	9.4
5	☐	10000.000	10129.406	21530.48	0.0506	P	1.8
6	☐	20000.000	19933.777	41476.41	0.0994	P	1.0

y = 4.9819E-006 * x + 9.2023E-005
R = 1.0000
DL = 0.4365
BEC = 18.47

Weight: <None>
Min Conc: <None>

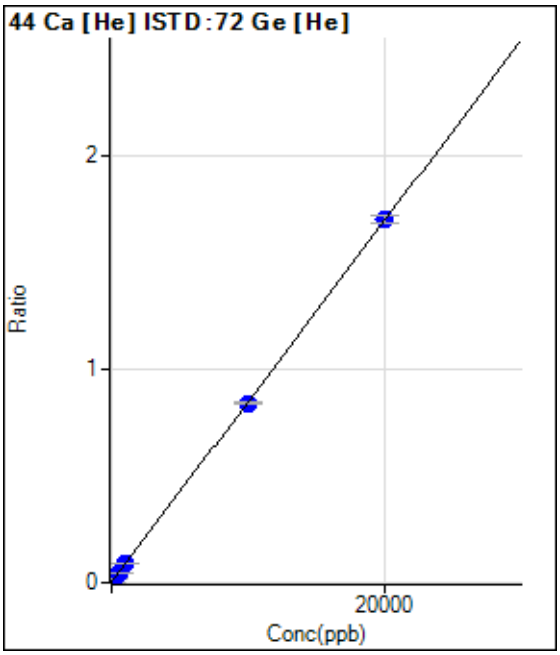
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19604.21	0.0128	P	1.8
2	☐	2.000	2.082	104004.98	0.0673	P	1.9
3	☐	5.000	5.124	228941.06	0.1469	P	3.8
4	☐	10.000	10.557	445603.89	0.2892	P	1.2
5	☐	100.000	98.893	3942521.92	2.6024	A	4.1
6	☐	200.000	200.522	7879084.68	5.2638	A	3.3

y = 0.0262 * x + 0.0128
R = 1.0000
DL = 0.0256
BEC = 0.4874

Weight: <None>
Min Conc: <None>

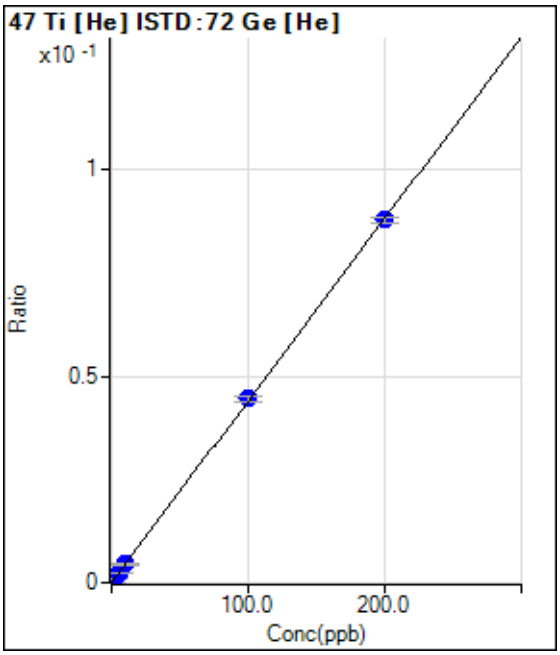


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	686.70	0.0016	P	12.8
2	☐	200.000	203.383	8219.26	0.0188	P	4.7
3	☐	500.000	506.862	19267.11	0.0446	P	3.0
4	☐	1000.000	1000.815	37023.29	0.0865	P	0.5
5	☐	10000.000	9901.205	358379.56	0.8415	P	1.5
6	☐	20000.000	20049.151	710281.94	1.7024	P	2.0

y = 8.4830E-005 * x + 0.0016
R = 1.0000
DL = 7.119
BEC = 18.61

Weight: <None>
Min Conc: <None>

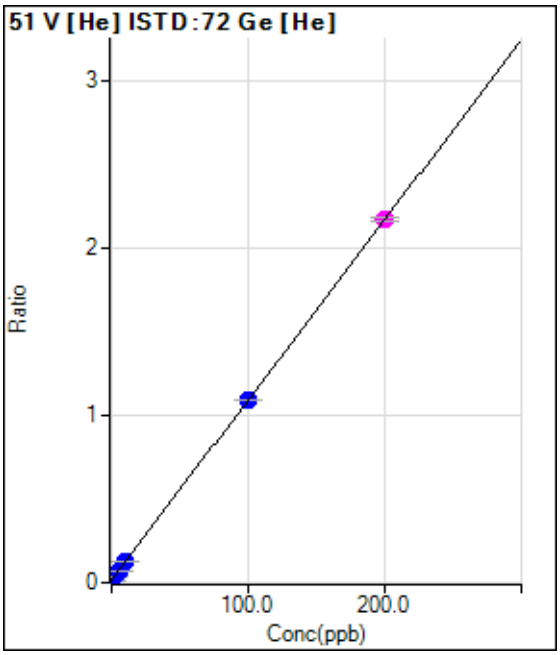
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	173.2
2	☐	2.000	1.734	340.01	0.0008	P	15.2
3	☐	5.000	5.350	1026.73	0.0024	P	15.6
4	☐	10.000	10.121	1916.84	0.0045	P	9.4
5	☐	100.000	101.030	18970.13	0.0445	P	2.6
6	☐	200.000	199.473	36692.82	0.0879	P	1.7

y = 4.4074E-004 * x + 1.5396E-005
R = 1.0000
DL = 0.1815
BEC = 0.03493

Weight: <None>
Min Conc: <None>

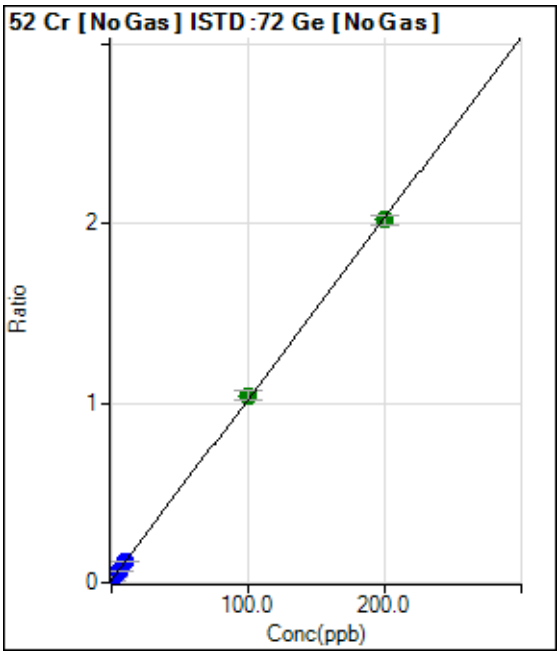


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6459.33	0.0149	P	2.2
2	☐	2.000	2.029	16018.29	0.0367	P	0.8
3	☐	5.000	4.975	29574.13	0.0684	P	1.8
4	☐	10.000	10.245	53583.20	0.1252	P	0.7
5	☐	100.000	99.928	464524.85	1.0907	P	0.3
6	☐	200.000	200.024	904818.16	2.1684	M	0.9

y = 0.0108 * x + 0.0149
R = 1.0000
DL = 0.09038
BEC = 1.38

Weight: <None>
Min Conc: <None>

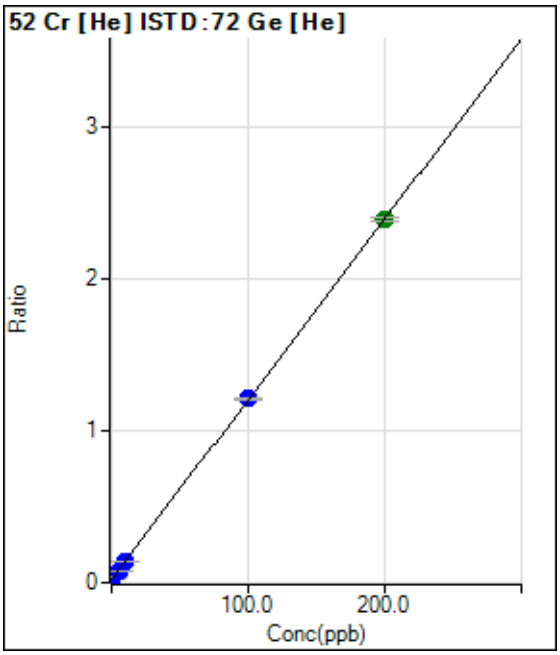
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22582.21	0.0147	P	1.6
2	☐	2.000	2.095	55392.11	0.0358	P	1.1
3	☐	5.000	4.979	101156.50	0.0649	P	4.0
4	☐	10.000	10.322	183026.93	0.1188	P	2.8
5	☐	100.000	101.980	1580460.65	1.0434	A	4.9
6	☐	200.000	198.994	3027003.70	2.0220	A	2.5

y = 0.0101 * x + 0.0147
R = 0.9999
DL = 0.06871
BEC = 1.457

Weight: <None>
Min Conc: <None>

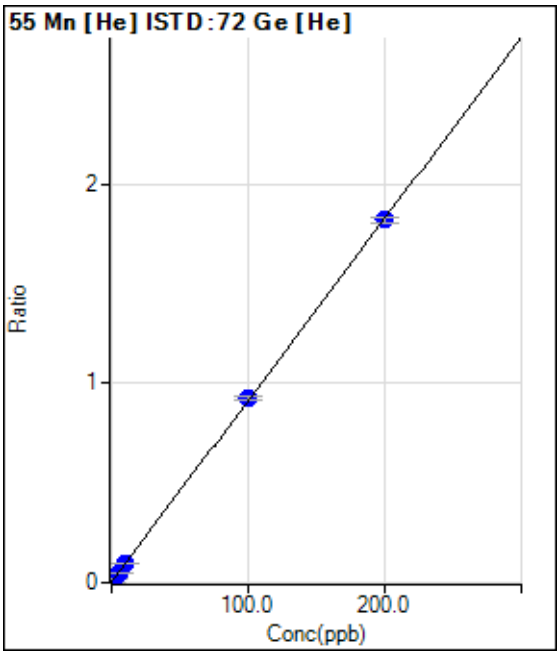


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8469.46	0.0195	P	2.7
2	☐	2.000	2.119	19450.77	0.0446	P	2.5
3	☐	5.000	5.178	34935.04	0.0808	P	2.6
4	☐	10.000	10.385	60982.85	0.1425	P	1.9
5	☐	100.000	100.603	515672.44	1.2109	P	1.2
6	☐	200.000	199.674	994779.18	2.3841	A	1.0

y = 0.0118 * x + 0.0195
R = 1.0000
DL = 0.1329
BEC = 1.645

Weight: <None>
Min Conc: <None>

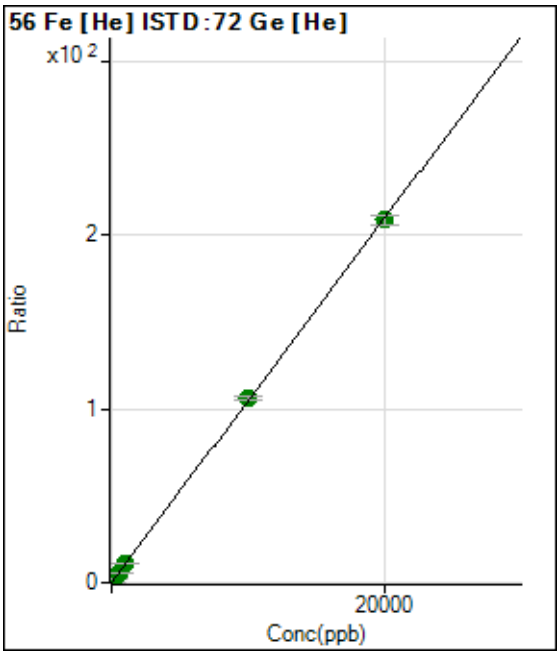
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1313.42	0.0030	P	12.6
2	☐	2.000	2.159	9910.44	0.0227	P	3.9
3	☐	5.000	5.122	21500.55	0.0497	P	0.9
4	☐	10.000	10.463	42139.29	0.0984	P	2.4
5	☐	100.000	100.973	393474.36	0.9239	P	1.8
6	☐	200.000	199.486	760358.43	1.8224	P	1.2

y = 0.0091 * x + 0.0030
R = 1.0000
DL = 0.1248
BEC = 0.3313

Weight: <None>
Min Conc: <None>

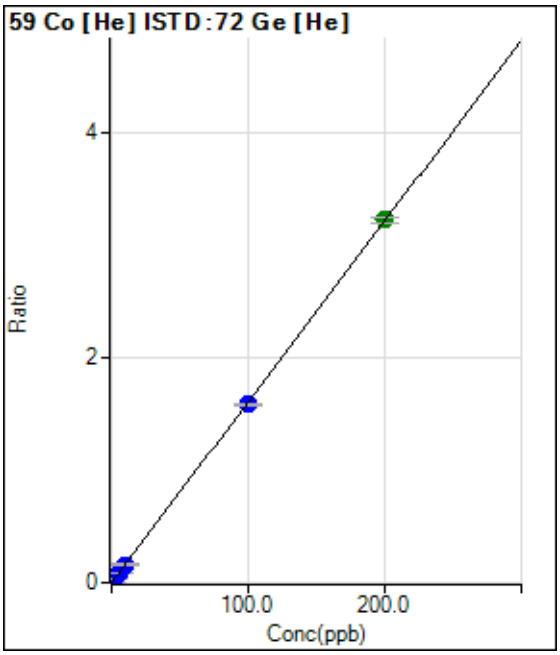


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20525.75	0.0472	P	2.7
2	☐	200.000	212.080	989147.59	2.2666	A	3.0
3	☐	500.000	527.020	2404220.75	5.5625	A	3.1
4	☐	1000.000	1053.531	4740043.99	11.0725	A	1.1
5	☐	10000.000	10156.139	45284037.66	106.3318	A	1.6
6	☐	20000.000	19918.458	86984112.04	208.4950	A	2.7

y = 0.0105 * x + 0.0472
R = 1.0000
DL = 0.3602
BEC = 4.512

Weight: <None>
Min Conc: <None>

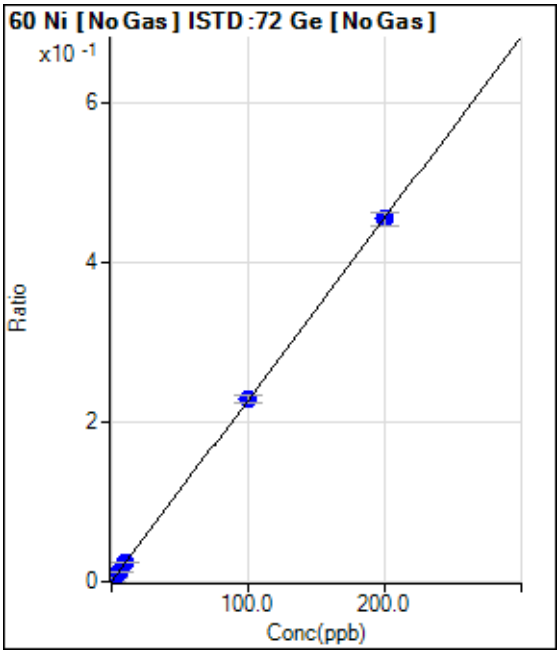
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146.67	0.0003	P	23.3
2	☐	2.000	2.077	14738.23	0.0338	P	4.4
3	☐	5.000	5.063	35359.69	0.0818	P	2.4
4	☐	10.000	10.057	69430.31	0.1622	P	1.2
5	☐	100.000	98.491	675067.15	1.5851	P	0.8
6	☐	200.000	200.749	1348048.42	3.2305	A	1.6

y = 0.0161 * x + 3.3710E-004
R = 1.0000
DL = 0.01466
BEC = 0.02095

Weight: <None>
Min Conc: <None>

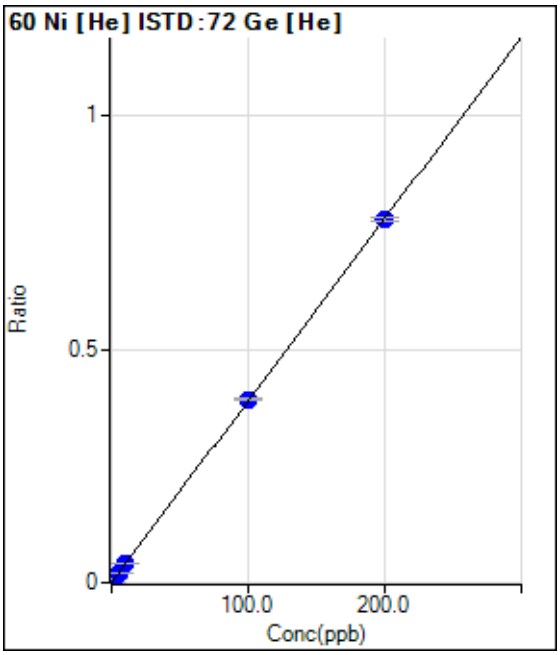


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	446.69	0.0003	P	9.3
2	☐	2.000	2.139	7982.47	0.0052	P	6.8
3	☐	5.000	5.160	18773.24	0.0121	P	6.6
4	☐	10.000	10.318	36676.51	0.0238	P	3.5
5	☐	100.000	100.688	348177.14	0.2298	P	3.8
6	☐	200.000	199.635	681574.91	0.4554	P	3.7

y = 0.0023 * x + 2.9081E-004
R = 1.0000
DL = 0.03558
BEC = 0.1276

Weight: <None>
Min Conc: <None>

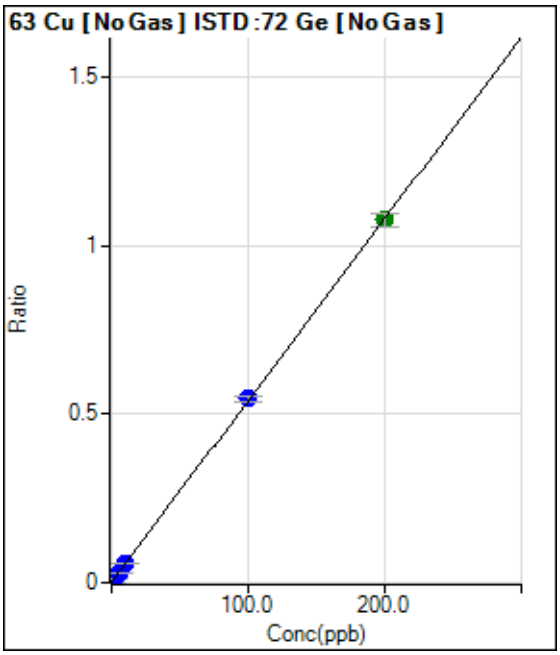
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226.68	0.0005	P	21.2
2	☐	2.000	2.174	3920.64	0.0090	P	6.9
3	☐	5.000	5.219	9009.80	0.0208	P	1.7
4	☐	10.000	10.460	17655.12	0.0412	P	4.0
5	☐	100.000	100.824	167414.96	0.3931	P	1.2
6	☐	200.000	199.558	324427.30	0.7776	P	1.2

y = 0.0039 * x + 5.2171E-004
R = 1.0000
DL = 0.08536
BEC = 0.134

Weight: <None>
Min Conc: <None>

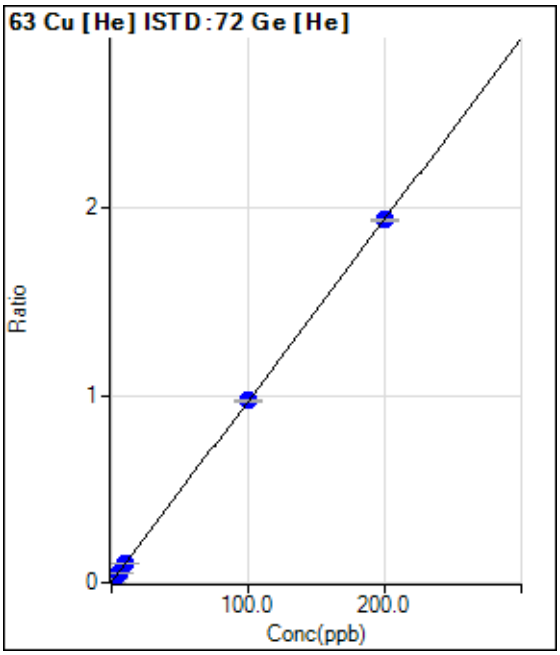


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2100.20	0.0014	P	5.9
2	☐	2.000	2.003	18789.93	0.0122	P	4.3
3	☐	5.000	4.994	44045.10	0.0283	P	3.3
4	☐	10.000	10.335	87849.92	0.0570	P	2.6
5	☐	100.000	100.885	825338.48	0.5447	P	3.1
6	☐	200.000	199.541	1610706.54	1.0760	A	3.6

y = 0.0054 * x + 0.0014
R = 1.0000
DL = 0.04482
BEC = 0.2539

Weight: <None>
Min Conc: <None>

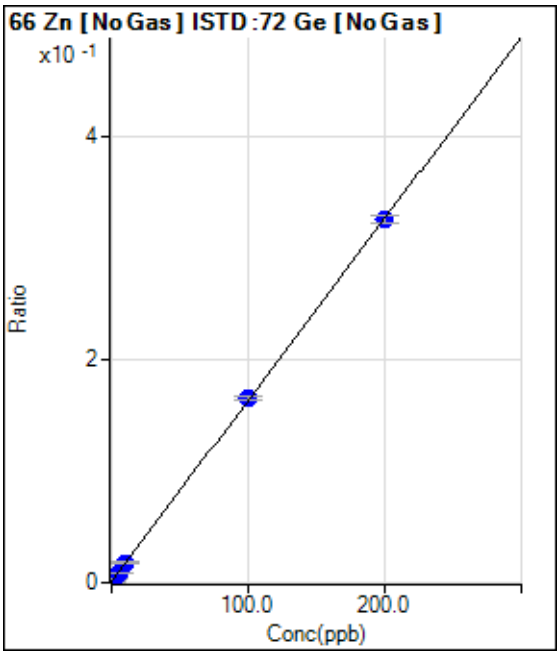
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	940.05	0.0022	P	13.8
2	☐	2.000	1.904	8996.44	0.0206	P	2.4
3	☐	5.000	5.036	22028.10	0.0510	P	2.2
4	☐	10.000	10.412	44122.06	0.1031	P	0.9
5	☐	100.000	100.263	414715.20	0.9738	P	1.5
6	☐	200.000	199.848	808982.31	1.9388	P	0.4

y = 0.0097 * x + 0.0022
R = 1.0000
DL = 0.0925
BEC = 0.223

Weight: <None>
Min Conc: <None>

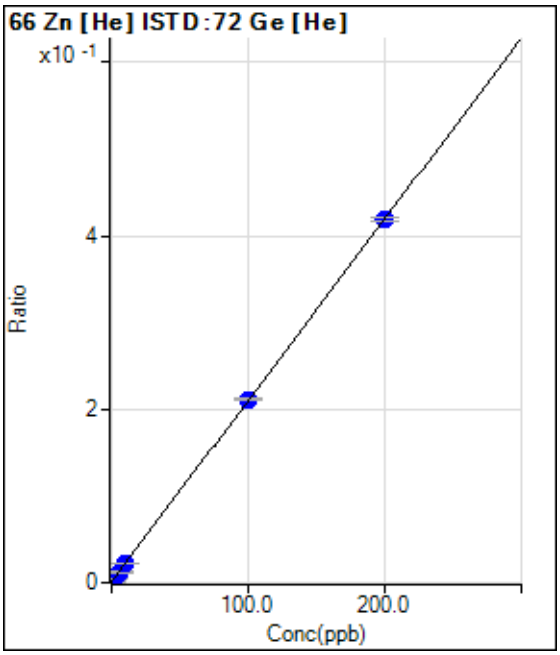


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1290.09	0.0008	P	10.4
2	☐	2.000	2.117	6628.41	0.0043	P	0.9
3	☐	5.000	4.857	13640.44	0.0087	P	2.4
4	☐	10.000	10.490	27601.67	0.0179	P	3.7
5	☐	100.000	101.197	250978.89	0.1656	P	2.5
6	☐	200.000	199.379	487264.46	0.3255	P	2.3

y = 0.0016 * x + 8.4107E-004
R = 1.0000
DL = 0.1618
BEC = 0.5166

Weight: <None>
Min Conc: <None>

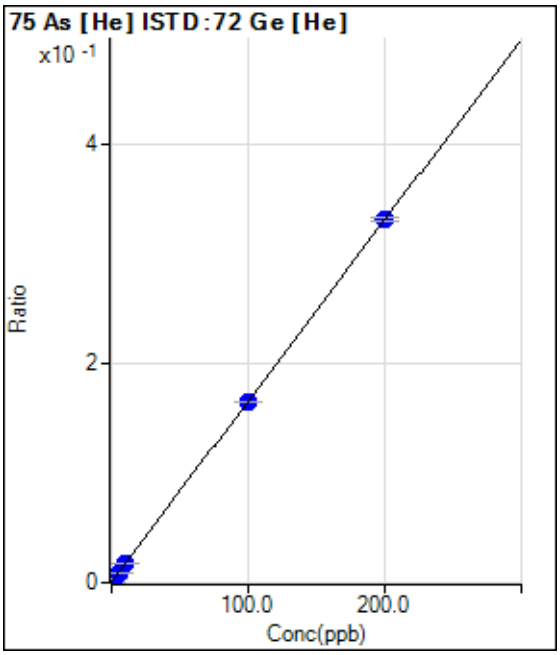
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	453.35	0.0010	P	27.1
2	☐	2.000	2.150	2416.93	0.0055	P	10.3
3	☐	5.000	5.152	5104.38	0.0118	P	6.7
4	☐	10.000	9.950	9346.71	0.0218	P	4.2
5	☐	100.000	100.607	89998.00	0.2113	P	1.3
6	☐	200.000	199.694	174592.11	0.4184	P	0.9

y = 0.0021 * x + 0.0010
R = 1.0000
DL = 0.4055
BEC = 0.4983

Weight: <None>
Min Conc: <None>

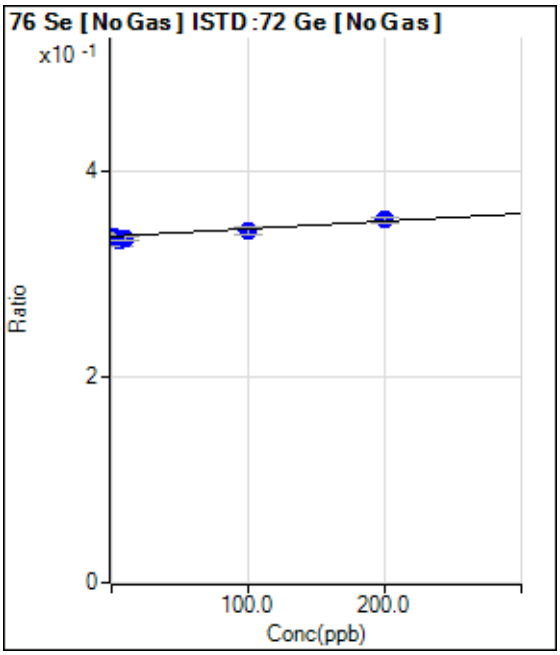


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	296.67	0.0007	P	13.7
2	☐	2.000	1.968	1714.56	0.0039	P	2.1
3	☐	5.000	5.090	3926.15	0.0091	P	1.6
4	☐	10.000	10.128	7445.44	0.0174	P	2.8
5	☐	100.000	99.546	70237.55	0.1649	P	0.5
6	☐	200.000	200.219	138116.02	0.3310	P	1.1

y = 0.0016 * x + 6.8238E-004
R = 1.0000
DL = 0.1695
BEC = 0.4136

Weight: <None>
Min Conc: <None>

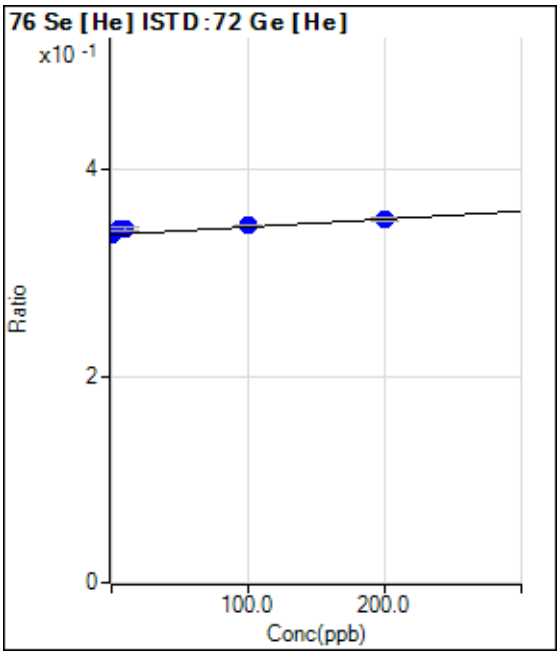
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	516307.35	0.3362	P	2.0
2	☐	2.000	6.297	520344.40	0.3366	P	1.3
3	☐	5.000	-53.346	517734.97	0.3322	P	3.1
4	☐	10.000	-29.376	514572.36	0.3340	P	1.4
5	☐	100.000	75.265	517838.46	0.3417	P	2.5
6	☐	200.000	215.752	527188.73	0.3521	P	1.5

y = 7.3842E-005 * x + 0.3362
R = 0.9662
DL = 268.4
BEC = 4553

Weight: <None>
Min Conc: <None>

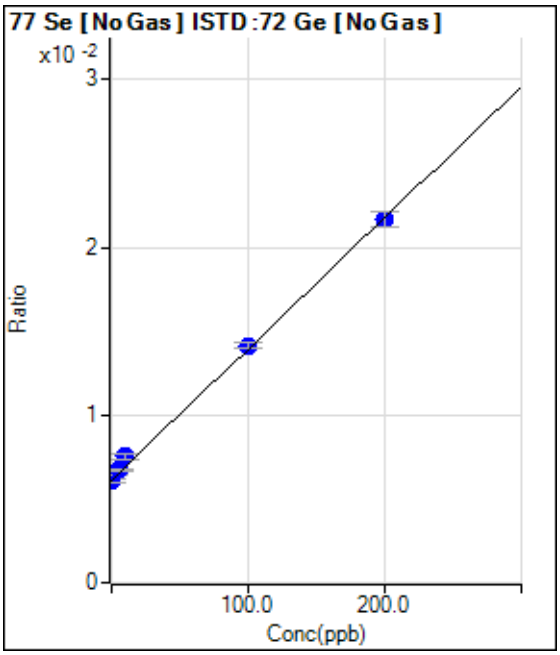


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	146429.49	0.3369	P	0.7
2	☐	2.000	17.947	147618.44	0.3382	P	0.3
3	☐	5.000	77.062	148159.01	0.3427	P	1.2
4	☐	10.000	66.770	146393.13	0.3420	P	1.0
5	☐	100.000	111.944	147094.67	0.3454	P	0.4
6	☐	200.000	189.228	146568.57	0.3513	P	1.1

y = 7.6194E-005 * x + 0.3369
R = 0.9197
DL = 89.18
BEC = 4421

Weight: <None>
Min Conc: <None>

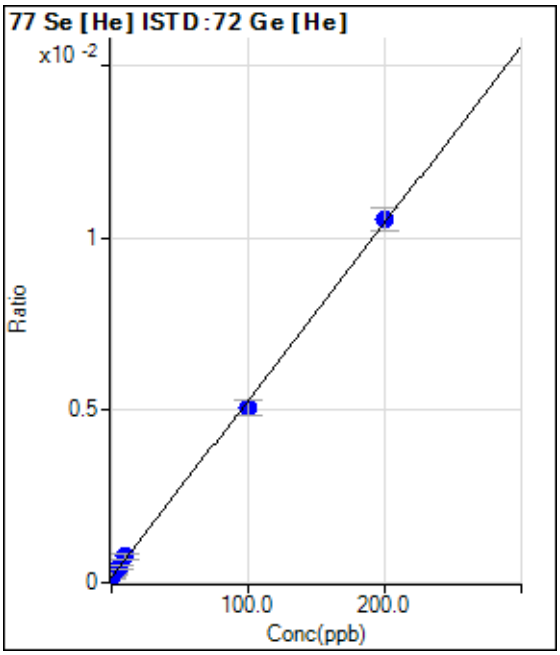
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9413.43	0.0061	P	3.8
2	☐	2.000	4.504	10023.89	0.0065	P	2.3
3	☐	5.000	7.663	10494.26	0.0067	P	1.7
4	☐	10.000	17.892	11598.50	0.0075	P	5.3
5	☐	100.000	102.662	21467.40	0.0142	P	2.6
6	☐	200.000	198.183	32389.23	0.0216	P	4.4

y = 7.8265E-005 * x + 0.0061
R = 0.9994
DL = 9.007
BEC = 78.34

Weight: <None>
Min Conc: <None>

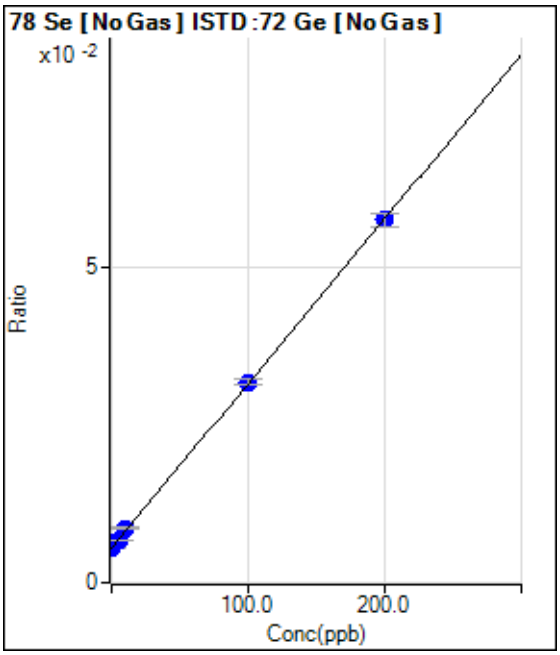


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0002	P	38.2
2	☐	2.000	2.356	120.00	0.0003	P	21.4
3	☐	5.000	6.176	203.34	0.0005	P	24.0
4	☐	10.000	11.714	323.34	0.0008	P	18.0
5	☐	100.000	96.024	2166.88	0.0051	P	8.3
6	☐	200.000	201.869	4390.80	0.0105	P	6.3

y = 5.1385E-005 * x + 1.5364E-004
R = 0.9996
DL = 3.431
BEC = 2.99

Weight: <None>
Min Conc: <None>

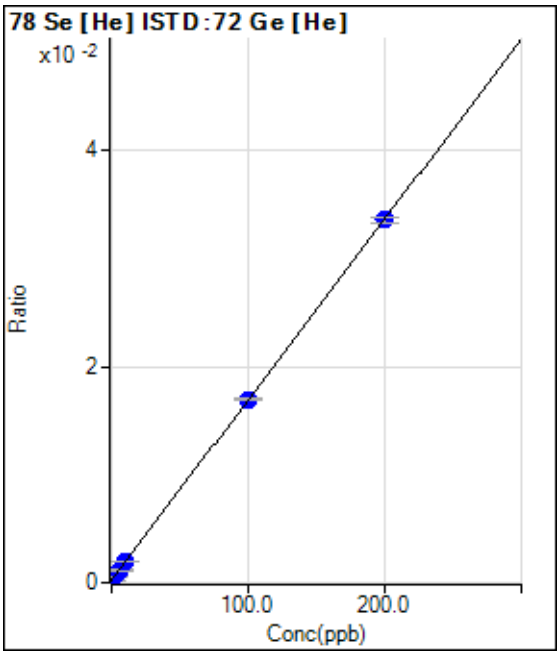
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8479.50	0.0055	P	2.7
2	☐	2.000	3.791	10067.27	0.0065	P	1.8
3	☐	5.000	4.660	10510.93	0.0067	P	4.0
4	☐	10.000	11.976	13326.82	0.0087	P	4.5
5	☐	100.000	100.895	48330.48	0.0319	P	3.1
6	☐	200.000	199.444	86306.71	0.0577	P	3.7

y = 2.6142E-004 * x + 0.0055
R = 0.9999
DL = 1.738
BEC = 21.12

Weight: <None>
Min Conc: <None>

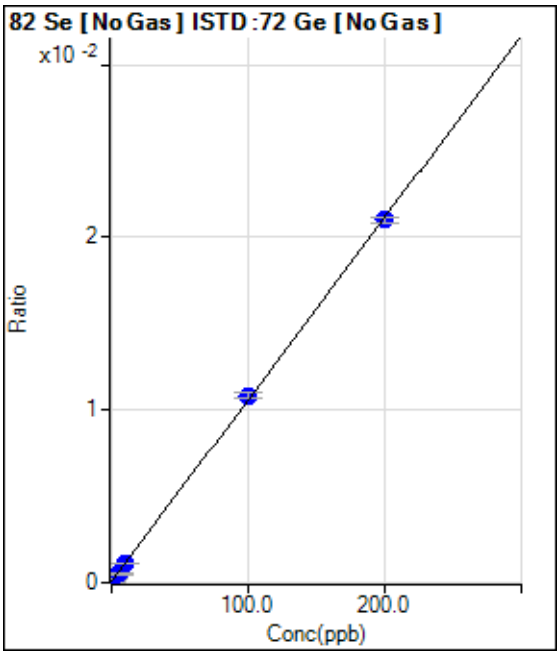


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98.67	0.0002	P	8.7
2	☐	2.000	2.218	260.67	0.0006	P	10.5
3	☐	5.000	5.483	494.01	0.0011	P	2.6
4	☐	10.000	10.238	829.36	0.0019	P	0.2
5	☐	100.000	100.426	7240.64	0.0170	P	0.8
6	☐	200.000	199.761	14016.63	0.0336	P	1.3

y = 1.6704E-004 * x + 2.2701E-004
R = 1.0000
DL = 0.3529
BEC = 1.359

Weight: <None>
Min Conc: <None>

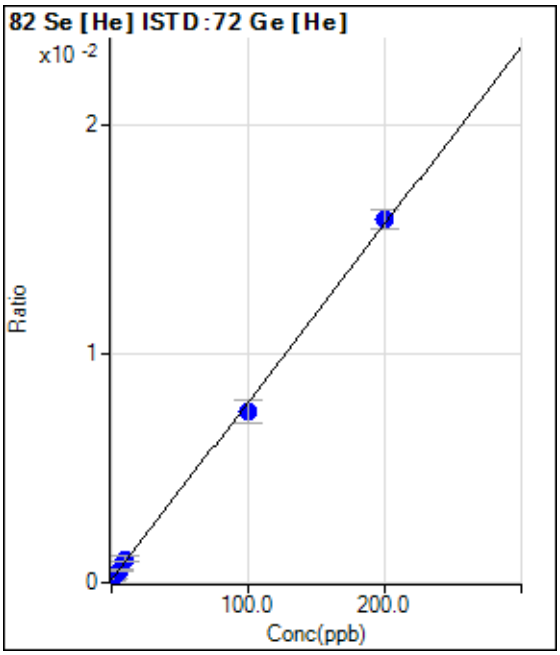
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.23	0.0001	P	61.2
2	☐	2.000	2.213	451.37	0.0003	P	18.4
3	☐	5.000	4.212	784.80	0.0005	P	14.7
4	☐	10.000	10.124	1734.92	0.0011	P	5.8
5	☐	100.000	102.289	16415.72	0.0108	P	2.7
6	☐	200.000	198.867	31448.76	0.0210	P	1.4

y = 1.0532E-004 * x + 5.8853E-005
R = 0.9999
DL = 1.027
BEC = 0.5588

Weight: <None>
Min Conc: <None>

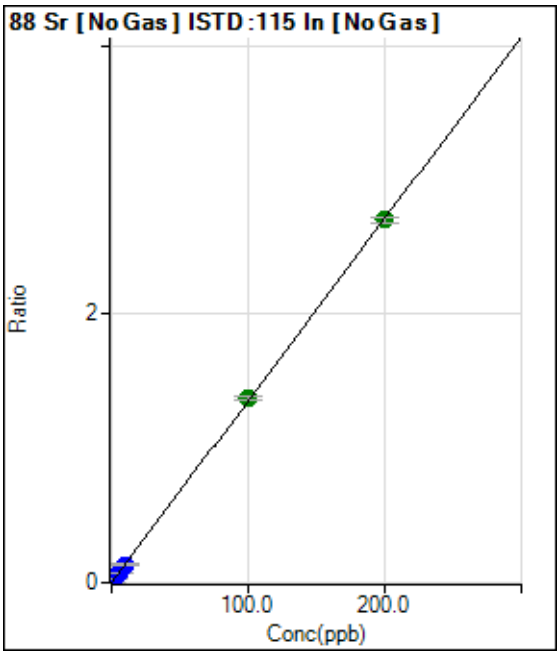


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0001	P	53.1
2	☐	2.000	1.576	110.00	0.0003	P	60.2
3	☐	5.000	5.169	230.01	0.0005	P	19.8
4	☐	10.000	11.364	433.35	0.0010	P	24.5
5	☐	100.000	94.835	3197.13	0.0075	P	13.6
6	☐	200.000	202.514	6625.10	0.0159	P	5.4

y = 7.7785E-005 * x + 1.3001E-004
R = 0.9995
DL = 2.663
BEC = 1.671

Weight: <None>
Min Conc: <None>

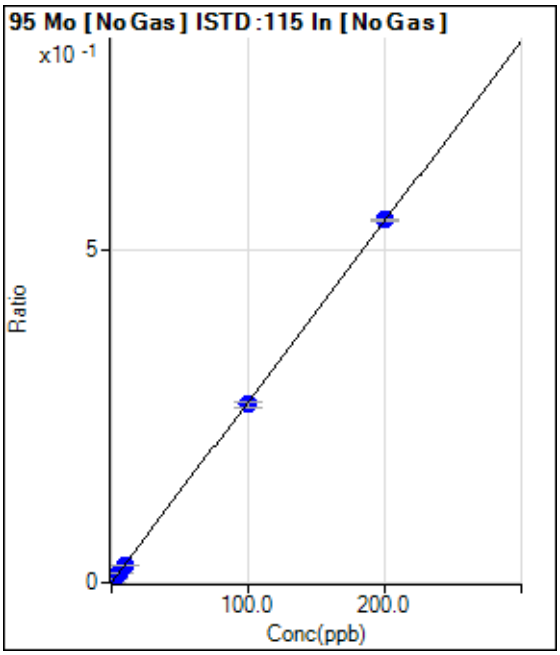
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1166.74	0.0007	P	7.6
2	☐	2.000	1.995	48943.29	0.0277	P	5.2
3	☐	5.000	4.952	120043.01	0.0678	P	1.6
4	☐	10.000	9.984	239772.28	0.1360	P	4.0
5	☐	100.000	101.078	2345392.57	1.3709	A	2.2
6	☐	200.000	199.463	4521308.68	2.7047	A	1.9

y = 0.0136 * x + 6.6831E-004
R = 1.0000
DL = 0.01128
BEC = 0.0493

Weight: <None>
Min Conc: <None>

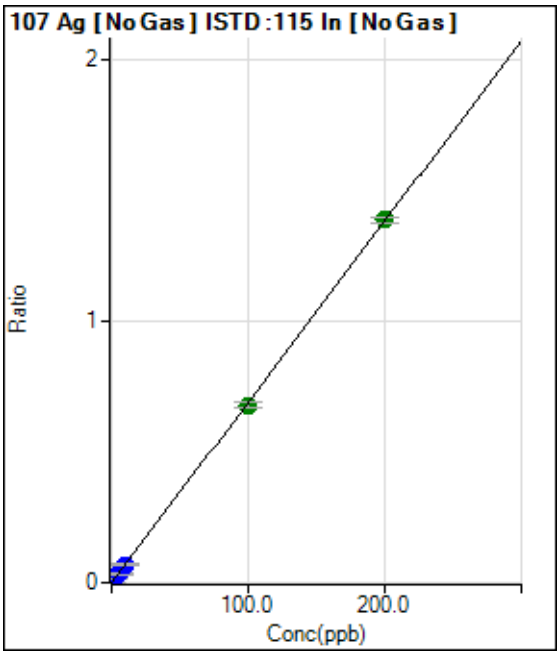


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	701.44	0.0004	P	106.2
2	☐	2.000	2.123	10875.10	0.0062	P	14.0
3	☐	5.000	4.712	23330.82	0.0132	P	2.3
4	☐	10.000	9.707	47120.38	0.0267	P	3.4
5	☐	100.000	98.402	457038.22	0.2672	P	3.1
6	☐	200.000	200.820	911074.86	0.5450	P	0.7

y = 0.0027 * x + 4.0051E-004
R = 1.0000
DL = 0.4704
BEC = 0.1477

Weight: <None>
Min Conc: <None>

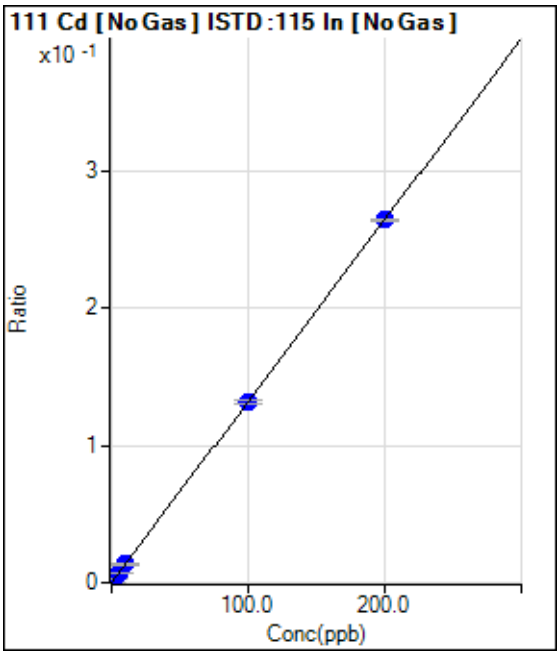
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.01	0.0001	P	30.0
2	☐	2.000	2.019	24796.98	0.0140	P	4.5
3	☐	5.000	4.792	58737.54	0.0332	P	1.8
4	☐	10.000	10.013	122047.20	0.0692	P	2.4
5	☐	100.000	98.248	1159981.29	0.6783	A	3.3
6	☐	200.000	200.881	2318497.31	1.3868	A	1.3

y = 0.0069 * x + 9.7146E-005
R = 0.9999
DL = 0.01266
BEC = 0.01407

Weight: <None>
Min Conc: <None>

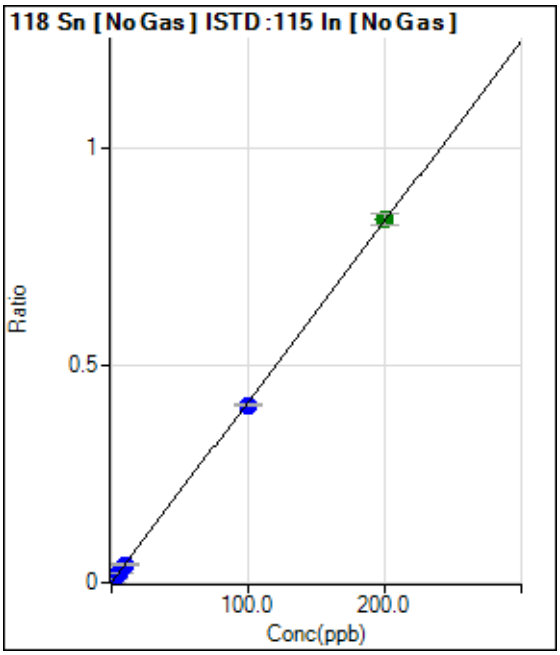


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	173.2
2	☐	2.000	2.007	4686.89	0.0027	P	10.5
3	☐	5.000	4.957	11613.61	0.0066	P	3.7
4	☐	10.000	10.135	23642.89	0.0134	P	2.4
5	☐	100.000	99.836	225839.66	0.1321	P	2.5
6	☐	200.000	200.076	442405.05	0.2646	P	0.8

y = 0.0013 * x + 3.7991E-006
R = 1.0000
DL = 0.01492
BEC = 0.002872

Weight: <None>
Min Conc: <None>

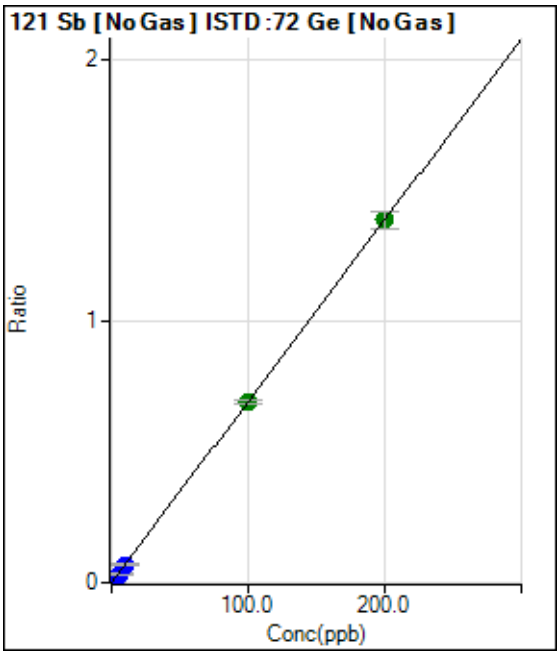
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1176.75	0.0007	P	6.9
2	☐	2.000	1.944	15422.64	0.0087	P	5.0
3	☐	5.000	4.835	36695.15	0.0207	P	2.2
4	☐	10.000	9.889	73482.26	0.0417	P	3.8
5	☐	100.000	98.365	698866.68	0.4086	P	1.7
6	☐	200.000	200.828	1393406.12	0.8335	A	3.0

y = 0.0041 * x + 6.7399E-004
R = 1.0000
DL = 0.03378
BEC = 0.1625

Weight: <None>
Min Conc: <None>

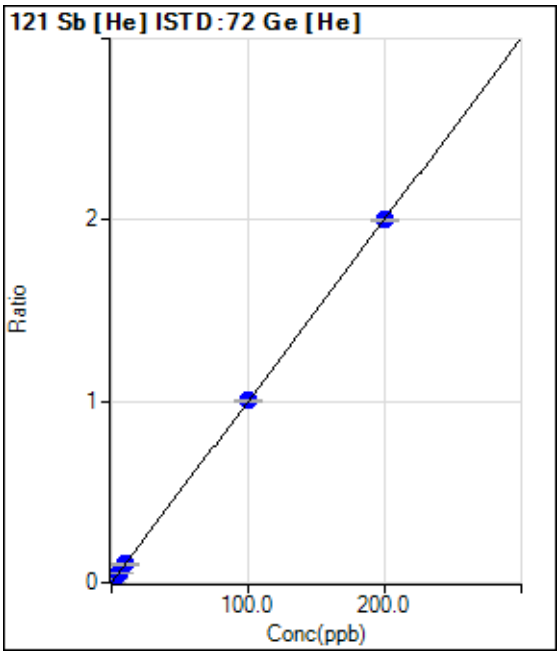


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	120.00	0.0001	P	70.9
2	☐	2.000	1.965	21144.04	0.0137	P	4.3
3	☐	5.000	4.712	50956.27	0.0327	P	2.7
4	☐	10.000	9.955	106282.67	0.0690	P	2.7
5	☐	100.000	99.698	1045988.53	0.6903	A	2.5
6	☐	200.000	200.161	2073811.53	1.3857	A	4.8

y = 0.0069 * x + 7.8381E-005
R = 1.0000
DL = 0.02408
BEC = 0.01132

Weight: <None>
Min Conc: <None>

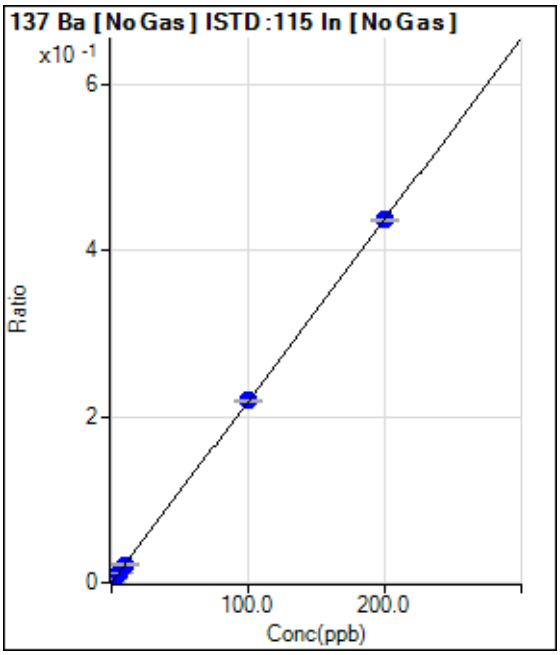
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0001	P	60.1
2	☐	2.000	2.006	8829.81	0.0202	P	1.9
3	☐	5.000	4.903	21277.68	0.0492	P	3.0
4	☐	10.000	10.050	43141.32	0.1008	P	0.6
5	☐	100.000	100.328	427816.84	1.0046	P	1.0
6	☐	200.000	199.836	834857.46	2.0008	P	0.6

y = 0.0100 * x + 1.4615E-004
R = 1.0000
DL = 0.02632
BEC = 0.0146

Weight: <None>
Min Conc: <None>

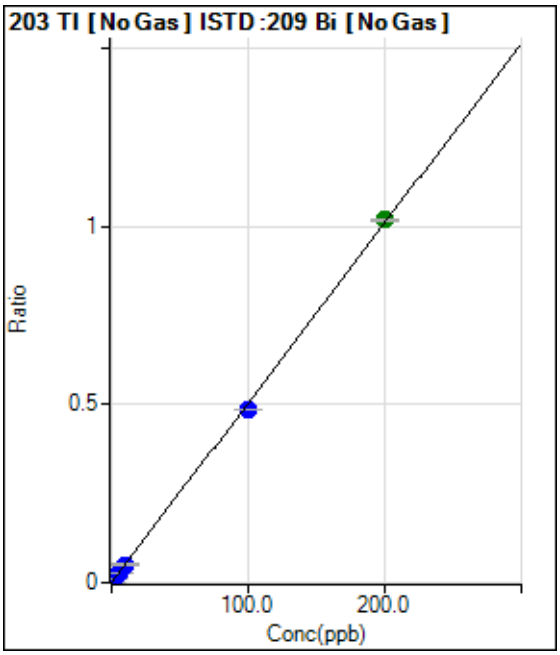


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	260.01	0.0001	P	13.7
2	☐	2.000	1.991	7939.23	0.0045	P	4.7
3	☐	5.000	4.968	19474.83	0.0110	P	2.0
4	☐	10.000	9.962	38614.54	0.0219	P	4.7
5	☐	100.000	100.172	374481.59	0.2189	P	1.0
6	☐	200.000	199.917	730184.75	0.4368	P	0.3

y = 0.0022 * x + 1.4901E-004
R = 1.0000
DL = 0.02814
BEC = 0.06823

Weight: <None>
Min Conc: <None>

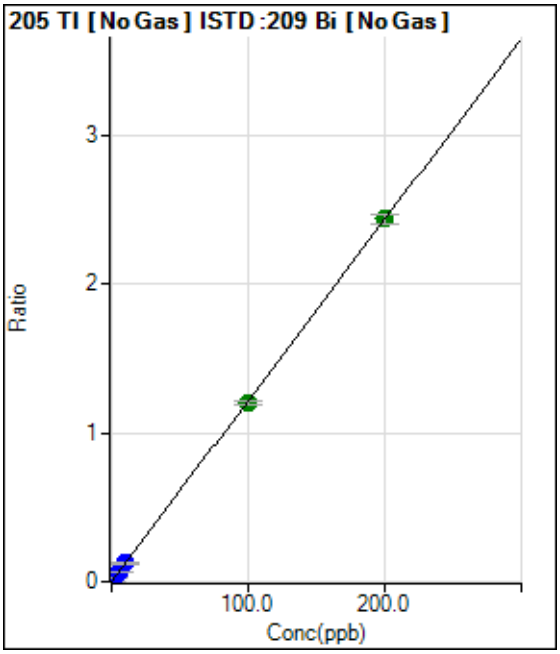
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	240.01	0.0001	P	8.5
2	☐	2.000	2.195	18727.73	0.0112	P	2.4
3	☐	5.000	5.312	45198.55	0.0270	P	3.3
4	☐	10.000	10.051	84924.83	0.0509	P	3.1
5	☐	100.000	96.203	788327.02	0.4858	P	0.6
6	☐	200.000	201.886	1615706.17	1.0194	A	0.6

y = 0.0050 * x + 1.4532E-004
R = 0.9997
DL = 0.007303
BEC = 0.02879

Weight: <None>
Min Conc: <None>

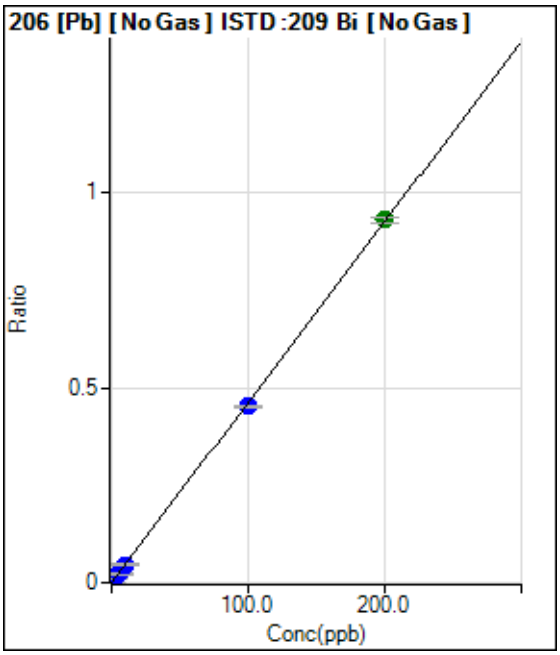


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	650.03	0.0004	P	3.2
2	☐	2.000	2.126	43767.50	0.0262	P	1.1
3	☐	5.000	5.295	108605.20	0.0648	P	2.2
4	☐	10.000	10.108	205779.47	0.1233	P	1.8
5	☐	100.000	98.866	1951050.02	1.2024	A	1.8
6	☐	200.000	200.553	3864674.22	2.4386	A	2.4

y = 0.0122 * x + 3.9356E-004
R = 1.0000
DL = 0.003133
BEC = 0.03237

Weight: <None>
Min Conc: <None>

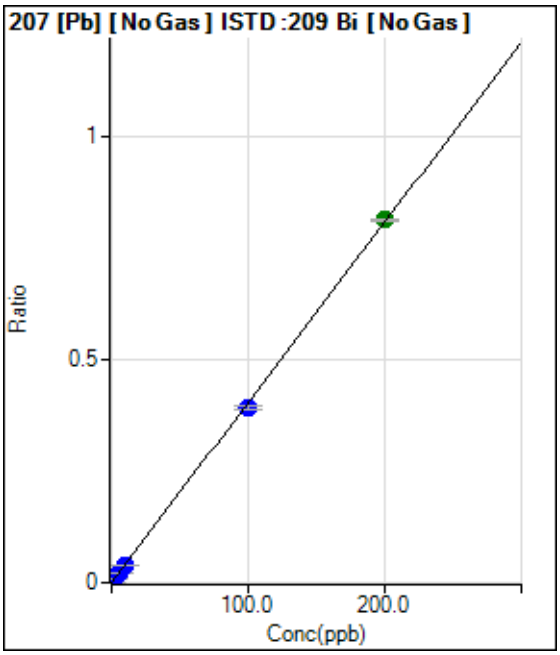
Calibration for 192_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.01	0.0001	P	29.4
2	☐	2.000	1.968	15393.14	0.0092	P	1.8
3	☐	5.000	4.811	37493.37	0.0224	P	5.9
4	☐	10.000	10.042	77718.79	0.0466	P	1.9
5	☐	100.000	97.671	732984.00	0.4517	P	0.8
6	☐	200.000	201.167	1474280.34	0.9302	A	1.6

y = 0.0046 * x + 1.2705E-004
R = 0.9999
DL = 0.02425
BEC = 0.02748

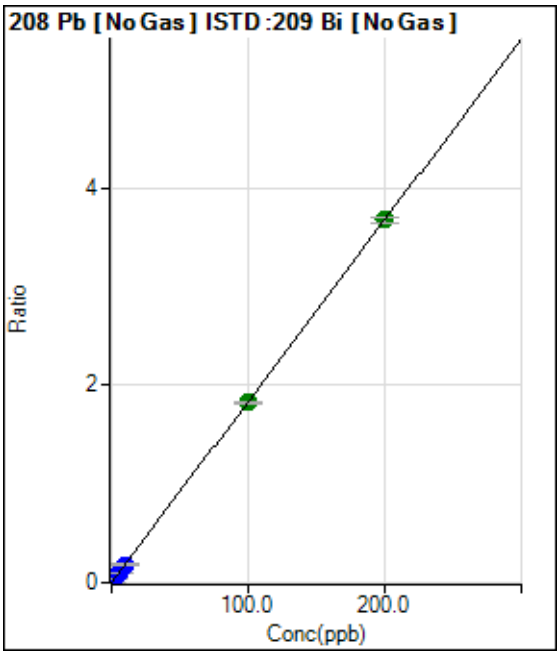
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	210.00	0.0001	P	24.9
2	☐	2.000	1.976	13490.85	0.0081	P	4.4
3	☐	5.000	4.855	33034.31	0.0197	P	1.7
4	☐	10.000	9.932	67036.78	0.0402	P	0.9
5	☐	100.000	97.247	636246.28	0.3921	P	1.7
6	☐	200.000	201.384	1286754.62	0.8118	A	0.8

y = 0.0040 * x + 1.2709E-004
R = 0.9999
DL = 0.02356
BEC = 0.03153

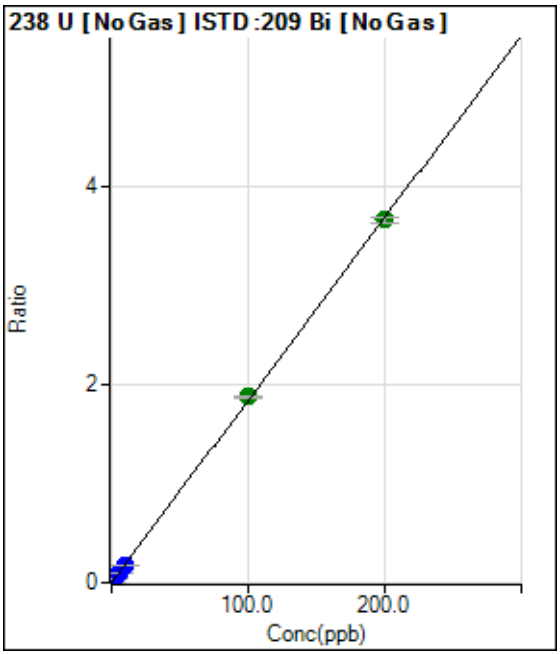
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	893.36	0.0005	P	8.5
2	☐	2.000	1.972	61329.97	0.0368	P	2.1
3	☐	5.000	4.881	151211.31	0.0902	P	3.4
4	☐	10.000	10.039	308697.02	0.1849	P	0.3
5	☐	100.000	99.569	2968622.34	1.8295	A	1.0
6	☐	200.000	200.217	5829601.68	3.6782	A	1.5

y = 0.0184 * x + 5.4080E-004
R = 1.0000
DL = 0.007471
BEC = 0.02944

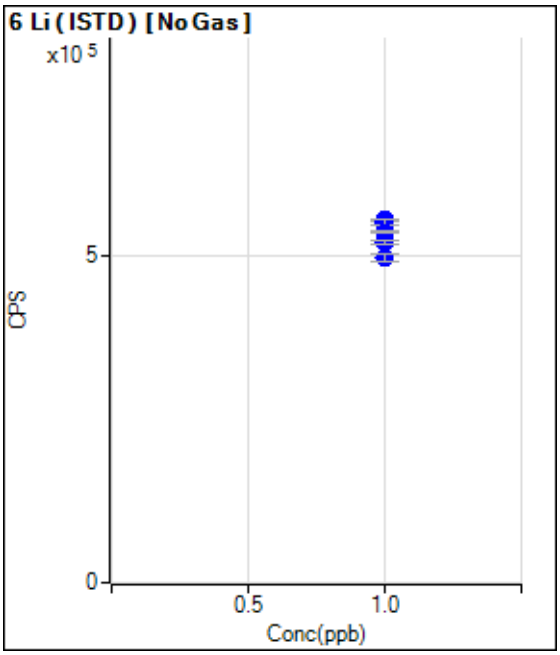
Weight: <None>
Min Conc: <None>



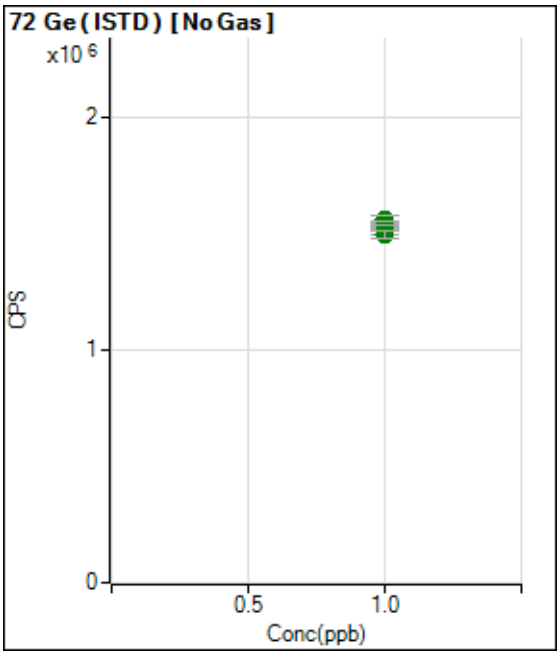
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	43.2
2	☐	2.000	1.990	61280.33	0.0367	P	3.1
3	☐	5.000	4.845	149940.19	0.0894	P	1.3
4	☐	10.000	9.881	304281.68	0.1823	P	1.4
5	☐	100.000	102.130	3056883.50	1.8839	A	1.3
6	☐	200.000	198.945	5815876.37	3.6697	A	1.9

y = 0.0184 * x + 4.0354E-005
R = 0.9999
DL = 0.002837
BEC = 0.002188

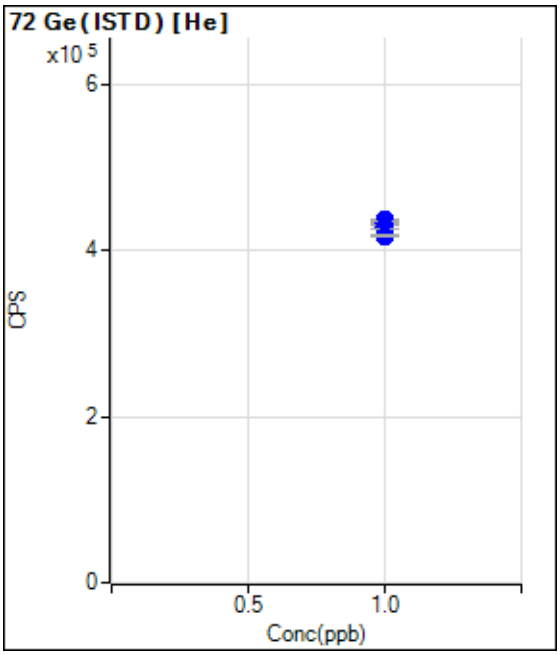
Weight: <None>
Min Conc: <None>



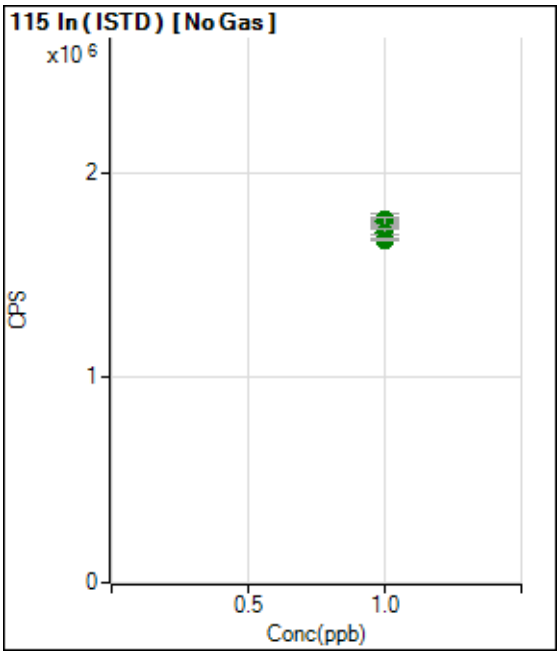
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		554546.19		P	0.9
2	☐	1.000		552228.01		P	1.6
3	☐	1.000		551060.85		P	1.5
4	☐	1.000		536316.57		P	1.0
5	☐	1.000		520074.52		P	0.8
6	☐	1.000		497056.77		P	2.3



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1536272.06		A	2.2
2	☐	1.000		1545878.21		A	1.1
3	☐	1.000		1558962.16		A	2.1
4	☐	1.000		1540927.42		A	2.0
5	☐	1.000		1515998.15		A	2.6
6	☐	1.000		1497584.56		A	2.3

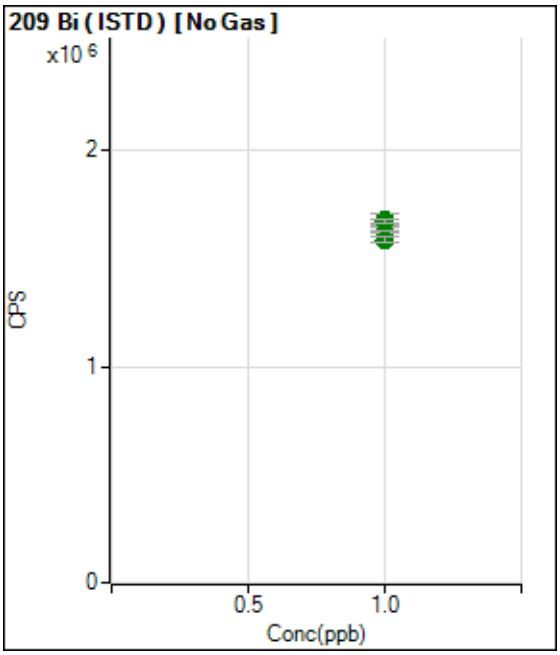


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		434692.04		P	0.8
2	☐	1.000		436436.98		P	0.7
3	☐	1.000		432297.31		P	1.0
4	☐	1.000		428133.22		P	1.4
5	☐	1.000		425877.78		P	0.1
6	☐	1.000		417263.51		P	0.9



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1744979.02		A	1.4
2	☐	1.000		1768019.16		A	4.2
3	☐	1.000		1770545.20		A	0.6
4	☐	1.000		1763688.52		A	1.8
5	☐	1.000		1710734.23		A	1.8
6	☐	1.000		1671778.33		A	0.7

Calibration for 192_ICV.d



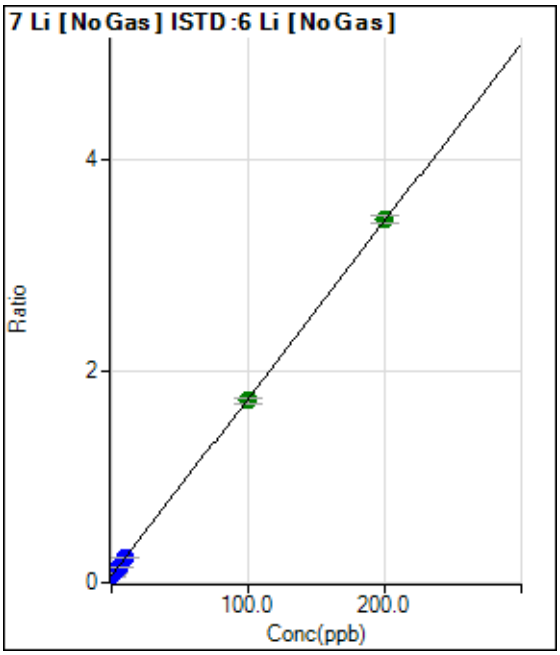
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1651723.26		A	0.4
2	☐	1.000		1668376.28		A	2.0
3	☐	1.000		1677594.61		A	3.5
4	☐	1.000		1669178.10		A	1.0
5	☐	1.000		1622676.48		A	0.3
6	☐	1.000		1585133.05		A	1.6

Calibration for 022_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\080723A.b\
Analysis File: 080723A.batch.bin
DA Date-Time: 8/7/2023 10:09:57 PM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	015CALB.d	CAL BLK	8/7/2023 12:22:28 PM
2	016CALS.d	2/10/200	8/7/2023 12:24:25 PM
3	017CALS.d	5/25/500	8/7/2023 12:26:31 PM
4	018CALS.d	10/50/100	8/7/2023 12:28:27 PM
5	019CALS.d	100/500/10K	8/7/2023 12:30:22 PM
6	020CALS.d	200/1000/20K	8/7/2023 12:32:32 PM

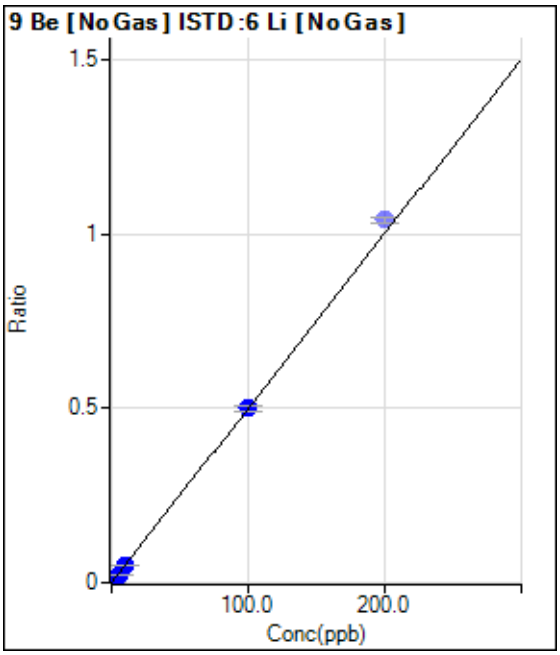
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46249.12	0.0653	P	7.2
2	☐	2.000	2.007	69009.76	0.0989	P	2.0
3	☐	5.000	4.700	102827.54	0.1439	P	2.4
4	☐	10.000	10.223	161238.76	0.2364	P	1.6
5	☐	100.000	98.600	1156579.83	1.7149	A	2.3
6	☐	200.000	200.696	2216629.86	3.4229	A	2.1

y = 0.0167 * x + 0.0653
R = 1.0000
DL = 0.8398
BEC = 3.904

Weight: <None>
Min Conc: <None>

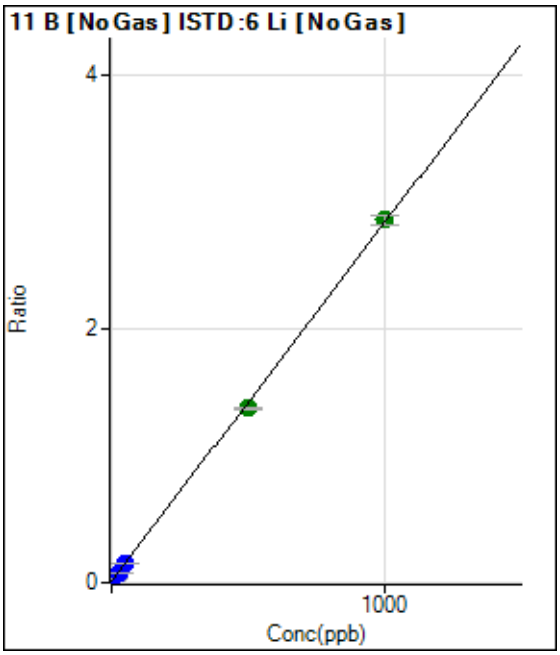


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.00	0.0001	P	35.6
2	☐	2.000	1.956	6878.39	0.0099	P	3.0
3	☐	5.000	4.706	16861.87	0.0236	P	1.8
4	☐	10.000	10.134	34617.48	0.0507	P	1.2
5	☐	100.000	100.002	337043.59	0.5000	P	3.7
6	☑	200.000		673415.15	1.0398	P	1.4

y = 0.0050 * x + 7.8293E-005
R = 1.0000
DL = 0.01673
BEC = 0.01566

Weight: <None>
Min Conc: <None>

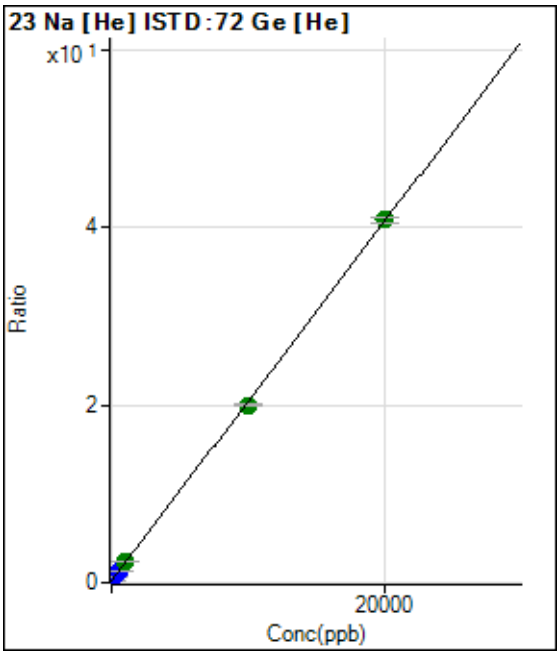
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7273.60	0.0103	P	4.2
2	☐	10.000	9.904	26658.63	0.0382	P	3.0
3	☐	25.000	23.434	54547.11	0.0764	P	3.0
4	☐	50.000	50.431	104042.06	0.1525	P	2.0
5	☐	500.000	483.063	925884.86	1.3729	A	1.7
6	☐	1000.000	1008.487	1848731.64	2.8549	A	2.8

y = 0.0028 * x + 0.0103
R = 0.9998
DL = 0.4589
BEC = 3.639

Weight: <None>
Min Conc: <None>

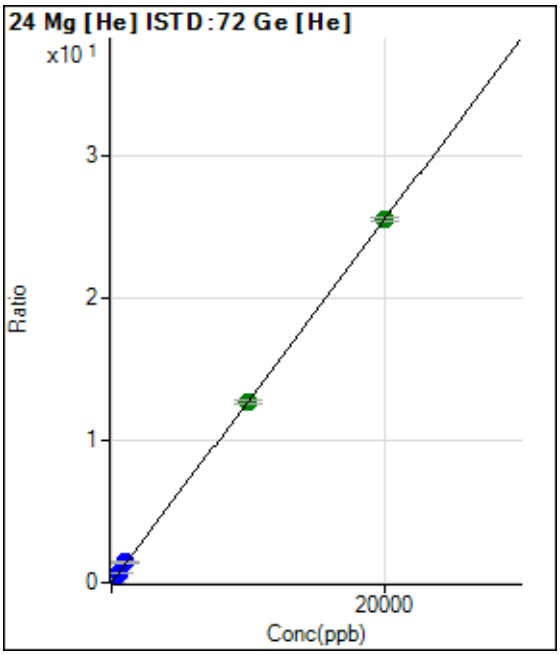


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86959.78	0.1951	P	2.8
2	☐	200.000	217.887	284565.36	0.6359	P	1.0
3	☐	500.000	539.754	572491.38	1.2871	P	3.0
4	☐	1000.000	1067.937	1053688.42	2.3557	A	2.1
5	☐	10000.000	9798.896	9027045.28	20.0203	A	2.1
6	☐	20000.000	20095.983	18022090.57	40.8535	A	1.5

y = 0.0020 * x + 0.1951
R = 0.9999
DL = 8.027
BEC = 96.42

Weight: <None>
Min Conc: <None>

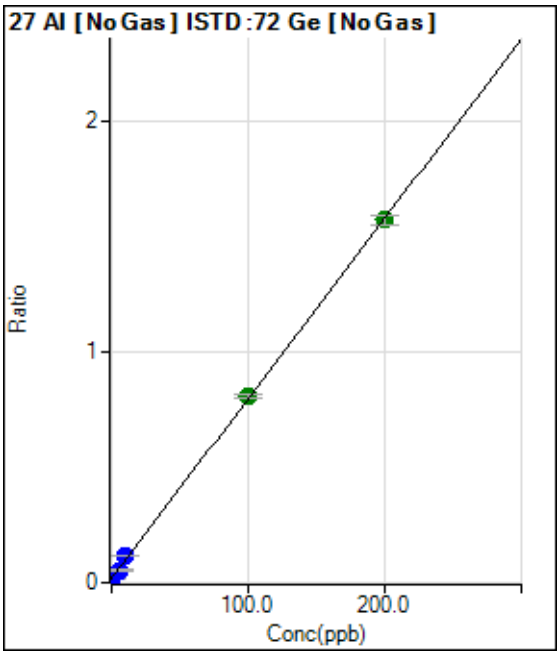
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	553.36	0.0012	P	14.6
2	☐	200.000	220.014	125884.97	0.2813	P	1.0
3	☐	500.000	546.504	309972.79	0.6969	P	3.3
4	☐	1000.000	1114.863	635333.04	1.4204	P	1.4
5	☐	10000.000	9997.902	5739005.96	12.7282	A	2.1
6	☐	20000.000	19993.943	11227838.58	25.4527	A	1.0

y = 0.0013 * x + 0.0012
R = 1.0000
DL = 0.4281
BEC = 0.9765

Weight: <None>
Min Conc: <None>

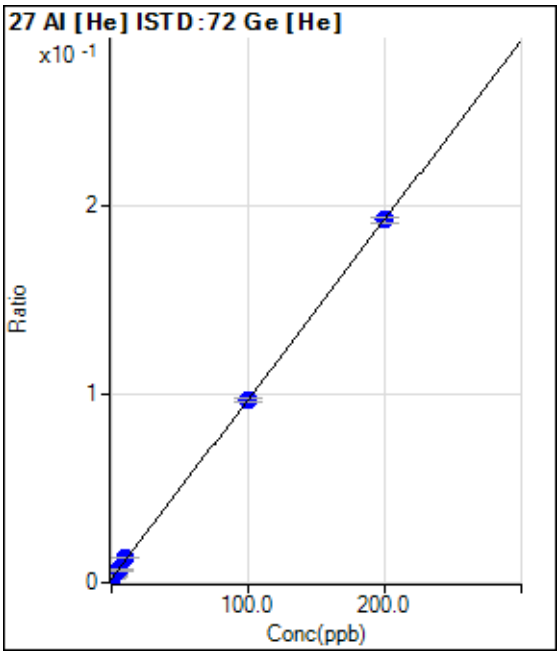


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30128.94	0.0182	P	21.8
2	☐	2.000	1.740	52824.22	0.0318	P	2.0
3	☐	5.000	4.567	88517.91	0.0538	P	3.3
4	☐	10.000	12.333	187166.62	0.1143	P	2.0
5	☐	100.000	100.993	1322031.33	0.8050	A	2.1
6	☐	200.000	199.400	2528100.79	1.5717	A	2.9

y = 0.0078 * x + 0.0182
R = 0.9999
DL = 1.524
BEC = 2.335

Weight: <None>
Min Conc: <None>

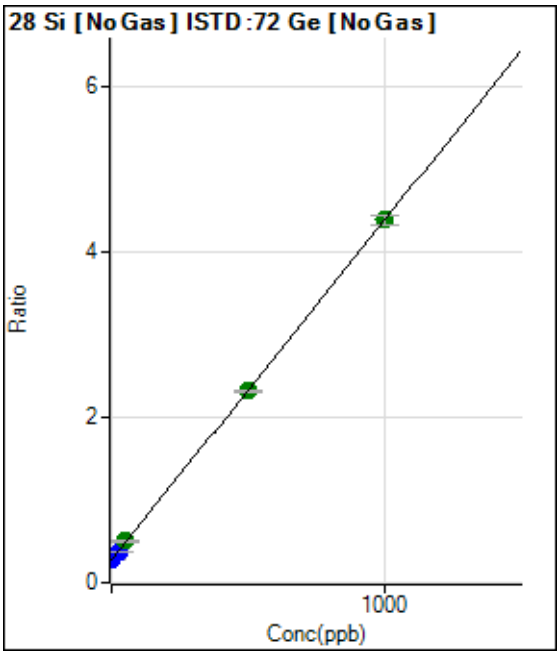
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	893.38	0.0020	P	1.5
2	☐	2.000	1.780	1656.79	0.0037	P	7.8
3	☐	5.000	5.125	3070.39	0.0069	P	7.7
4	☐	10.000	12.039	6038.08	0.0135	P	1.9
5	☐	100.000	99.917	43922.98	0.0974	P	2.5
6	☐	200.000	199.938	85102.77	0.1929	P	1.9

y = 9.5492E-004 * x + 0.0020
R = 0.9999
DL = 0.09316
BEC = 2.098

Weight: <None>
Min Conc: <None>

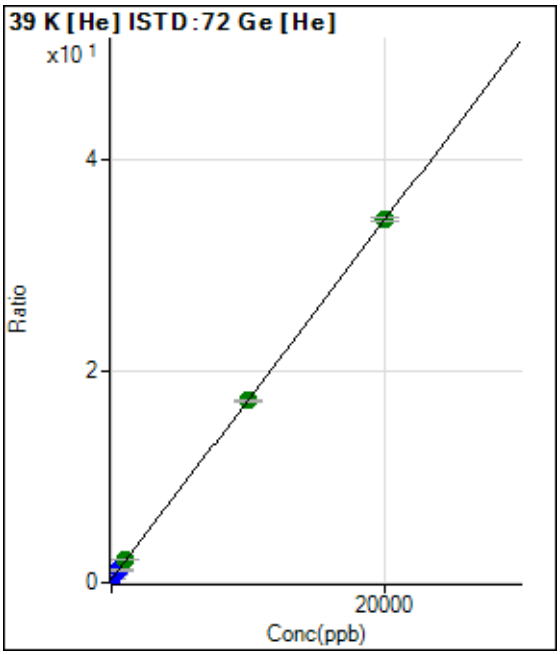


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	455535.12	0.2759	P	2.0
2	☐	10.000	10.274	529164.34	0.3181	P	0.1
3	☐	25.000	26.032	630134.14	0.3828	P	0.2
4	☐	50.000	56.561	832037.62	0.5080	A	3.4
5	☐	500.000	497.707	3807675.67	2.3185	A	0.8
6	☐	1000.000	1000.790	7049298.23	4.3832	A	2.5

y = 0.0041 * x + 0.2759
R = 1.0000
DL = 4.119
BEC = 67.23

Weight: <None>
Min Conc: <None>

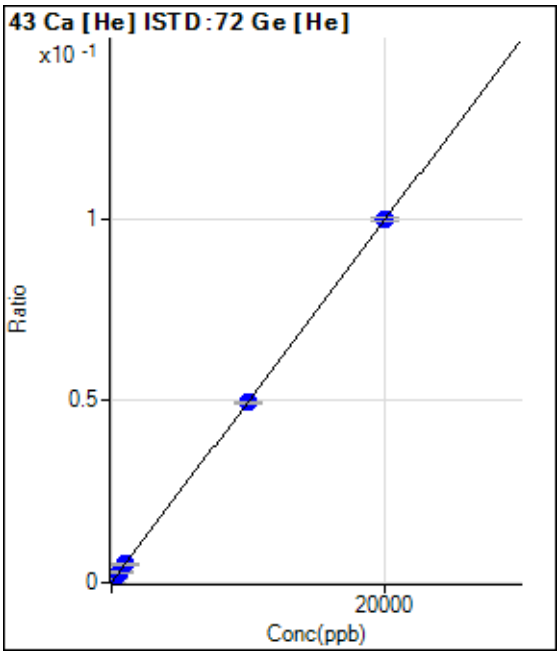
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	134782.68	0.3024	P	2.7
2	☐	200.000	210.679	295504.74	0.6604	P	1.6
3	☐	500.000	526.179	532195.32	1.1965	P	3.1
4	☐	1000.000	1064.903	944675.84	2.1120	A	0.1
5	☐	10000.000	9945.983	7757721.55	17.2044	A	1.3
6	☐	20000.000	20023.002	15143691.02	34.3292	A	1.1

y = 0.0017 * x + 0.3024
R = 1.0000
DL = 14.57
BEC = 177.9

Weight: <None>
Min Conc: <None>

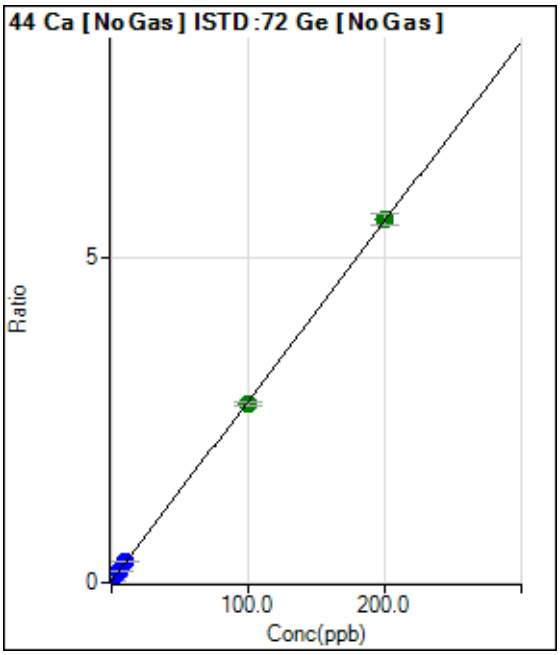


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0001	P	76.4
2	☐	200.000	197.604	473.35	0.0011	P	23.1
3	☐	500.000	550.275	1250.08	0.0028	P	11.5
4	☐	1000.000	1003.269	2266.90	0.0051	P	3.5
5	☐	10000.000	9935.811	22331.72	0.0495	P	1.8
6	☐	20000.000	20030.698	44010.66	0.0998	P	1.1

y = 4.9770E-006 * x + 7.4864E-005
R = 1.0000
DL = 34.47
BEC = 15.04

Weight: <None>
Min Conc: <None>

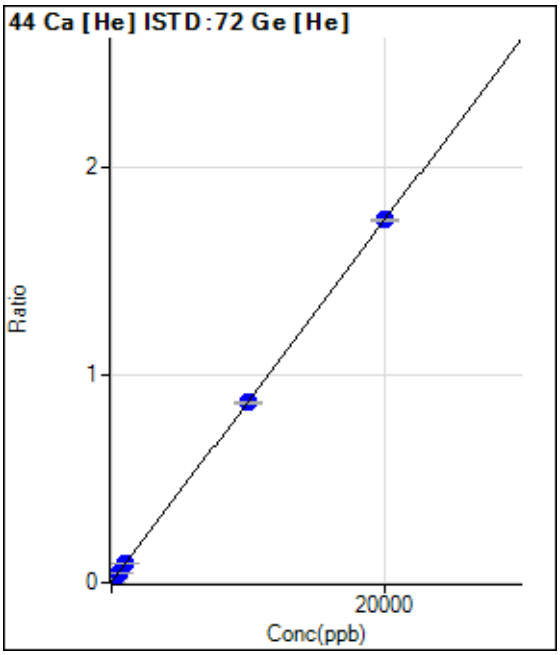
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41863.89	0.0254	P	4.0
2	☐	2.000	2.055	136602.44	0.0821	P	0.7
3	☐	5.000	5.114	274228.41	0.1666	P	2.8
4	☐	10.000	10.441	513913.86	0.3137	P	1.3
5	☐	100.000	98.296	4499935.04	2.7402	A	1.9
6	☐	200.000	200.827	8961082.78	5.5721	A	3.3

y = 0.0276 * x + 0.0254
R = 0.9999
DL = 0.1115
BEC = 0.9183

Weight: <None>
Min Conc: <None>

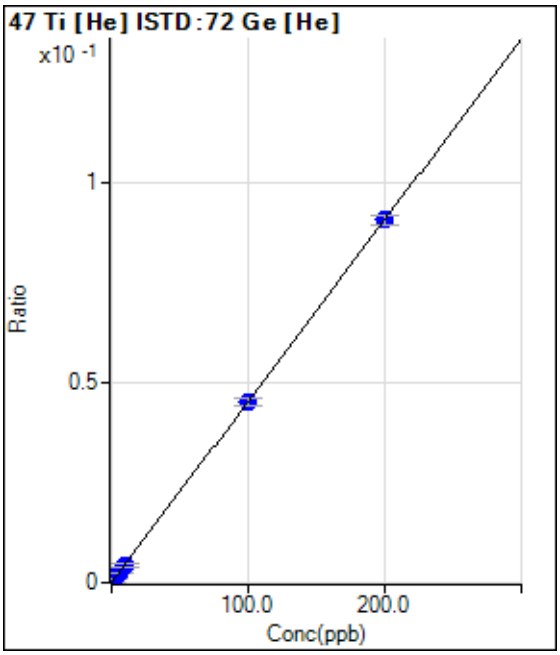


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	726.70	0.0016	P	8.6
2	☐	200.000	202.588	8619.51	0.0193	P	3.5
3	☐	500.000	502.285	20171.67	0.0453	P	2.2
4	☐	1000.000	1028.443	40757.47	0.0911	P	2.6
5	☐	10000.000	9943.085	390883.90	0.8669	P	1.4
6	☐	20000.000	20026.953	769485.38	1.7443	P	0.5

y = 8.7018E-005 * x + 0.0016
R = 1.0000
DL = 4.84
BEC = 18.75

Weight: <None>
Min Conc: <None>

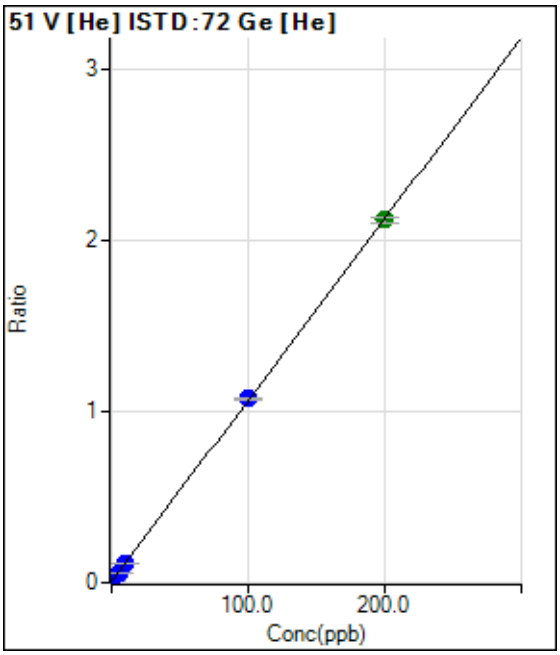
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.00	0.0000	P	99.0
2	☐	2.000	2.259	476.68	0.0011	P	24.0
3	☐	5.000	5.088	1043.40	0.0023	P	3.7
4	☐	10.000	9.547	1950.17	0.0044	P	13.3
5	☐	100.000	99.780	20355.39	0.0451	P	4.1
6	☐	200.000	200.128	39921.62	0.0905	P	2.3

y = 4.5202E-004 * x + 4.4433E-005
R = 1.0000
DL = 0.292
BEC = 0.0983

Weight: <None>
Min Conc: <None>

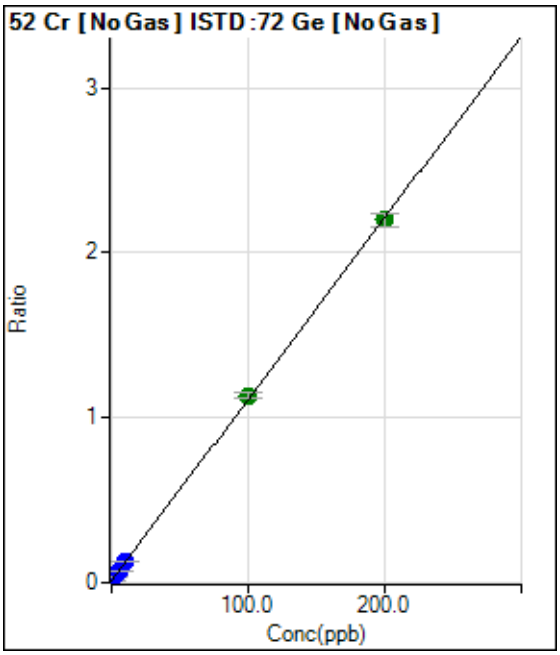


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3320.43	0.0074	P	4.1
2	☐	2.000	2.041	13012.88	0.0291	P	1.8
3	☐	5.000	5.000	26877.44	0.0604	P	3.1
4	☐	10.000	10.256	51940.24	0.1161	P	1.0
5	☐	100.000	100.782	484927.93	1.0754	P	0.9
6	☐	200.000	199.596	936266.15	2.1225	A	1.5

y = 0.0106 * x + 0.0074
R = 1.0000
DL = 0.08686
BEC = 0.703

Weight: <None>
Min Conc: <None>

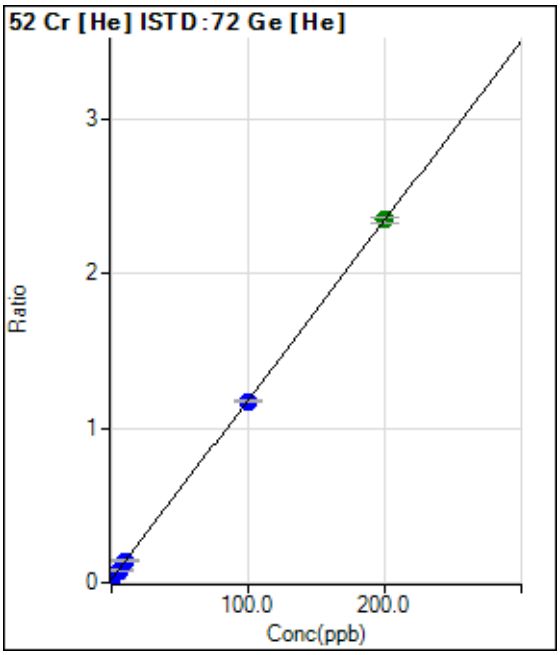
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20589.12	0.0125	P	3.7
2	☐	2.000	2.017	57621.60	0.0346	P	1.9
3	☐	5.000	4.963	110305.55	0.0670	P	1.5
4	☐	10.000	10.097	202174.44	0.1234	P	1.6
5	☐	100.000	102.067	1862400.07	1.1341	A	3.2
6	☐	200.000	198.963	3536097.76	2.1989	A	3.6

y = 0.0110 * x + 0.0125
R = 0.9999
DL = 0.1259
BEC = 1.135

Weight: <None>
Min Conc: <None>

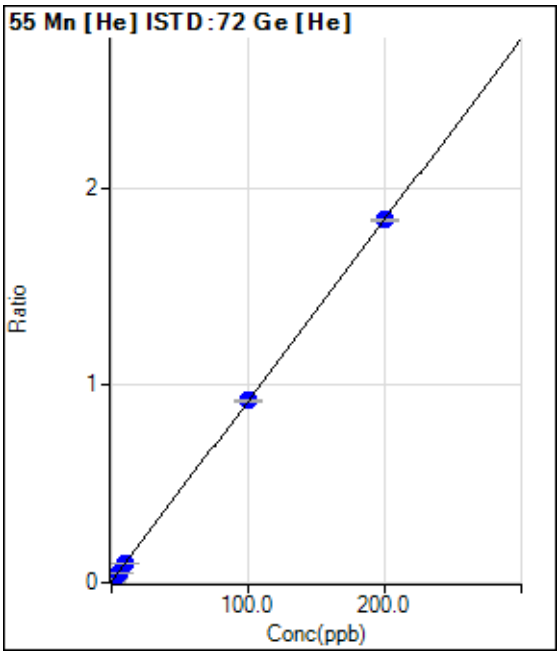


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9313.35	0.0209	P	1.5
2	☐	2.000	2.076	20111.81	0.0449	P	4.8
3	☐	5.000	5.145	35823.77	0.0805	P	3.0
4	☐	10.000	10.506	63829.08	0.1427	P	2.1
5	☐	100.000	99.281	528527.53	1.1721	P	0.8
6	☐	200.000	200.330	1033843.27	2.3438	A	1.9

y = 0.0116 * x + 0.0209
R = 1.0000
DL = 0.08021
BEC = 1.801

Weight: <None>
Min Conc: <None>

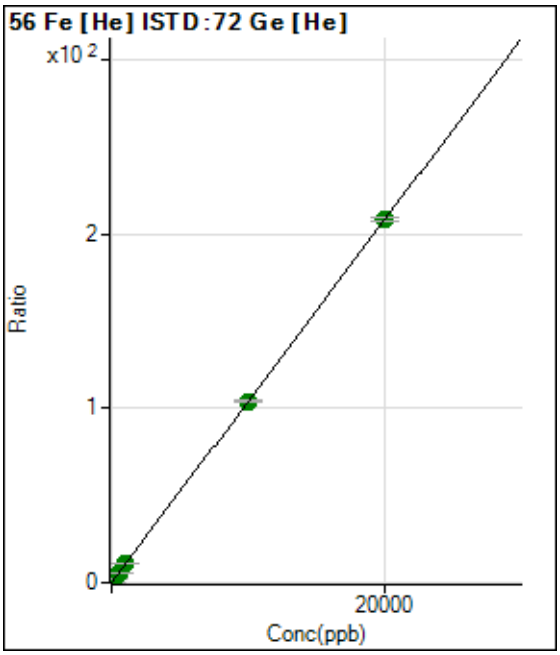
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2120.21	0.0048	P	7.6
2	☐	2.000	2.085	10684.34	0.0239	P	3.7
3	☐	5.000	5.186	23253.35	0.0523	P	4.8
4	☐	10.000	10.483	45108.15	0.1008	P	2.4
5	☐	100.000	100.063	415734.94	0.9220	P	1.7
6	☐	200.000	199.939	810623.37	1.8375	P	0.5

y = 0.0092 * x + 0.0048
R = 1.0000
DL = 0.1182
BEC = 0.5186

Weight: <None>
Min Conc: <None>

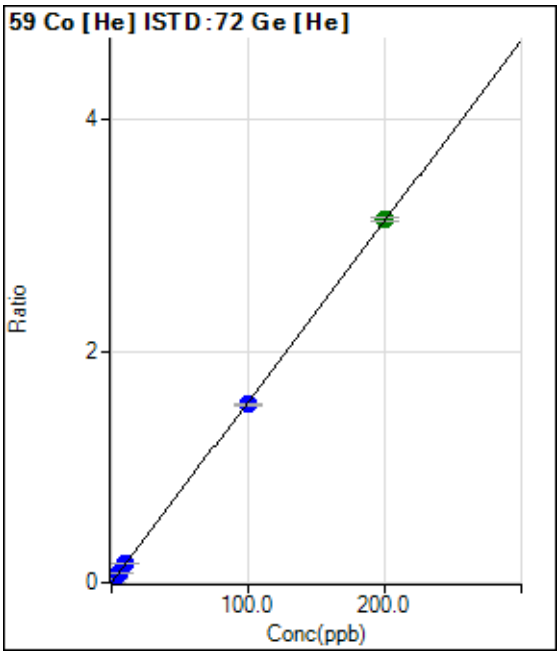


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18673.03	0.0419	P	1.7
2	☐	200.000	212.424	1006973.16	2.2505	A	2.7
3	☐	500.000	515.619	2403079.55	5.4029	A	3.2
4	☐	1000.000	1040.199	4856128.88	10.8570	A	0.8
5	☐	10000.000	9979.106	46804955.97	103.7963	A	1.0
6	☐	20000.000	20007.923	91791481.96	208.0675	A	1.1

y = 0.0104 * x + 0.0419
R = 1.0000
DL = 0.2058
BEC = 4.028

Weight: <None>
Min Conc: <None>

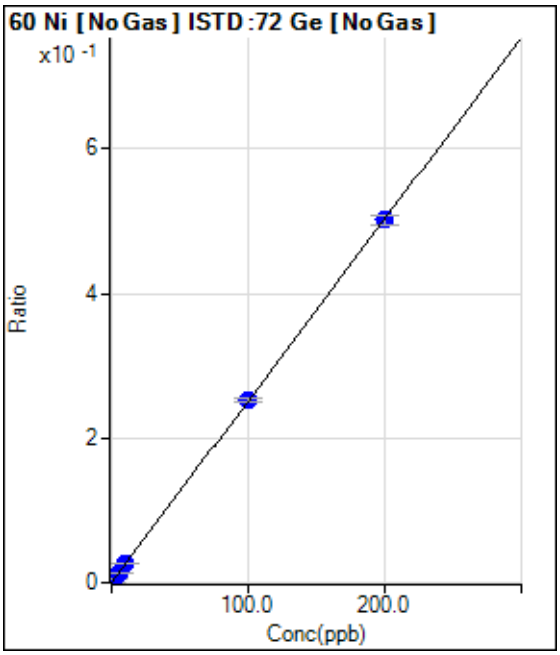
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	256.68	0.0006	P	5.9
2	☐	2.000	1.982	14104.23	0.0315	P	2.3
3	☐	5.000	5.138	35927.70	0.0808	P	3.3
4	☐	10.000	10.295	72133.84	0.1613	P	1.0
5	☐	100.000	98.549	693865.77	1.5388	P	1.8
6	☐	200.000	200.708	1382350.40	3.1335	A	0.9

y = 0.0156 * x + 5.7563E-004
R = 1.0000
DL = 0.006488
BEC = 0.03688

Weight: <None>
Min Conc: <None>

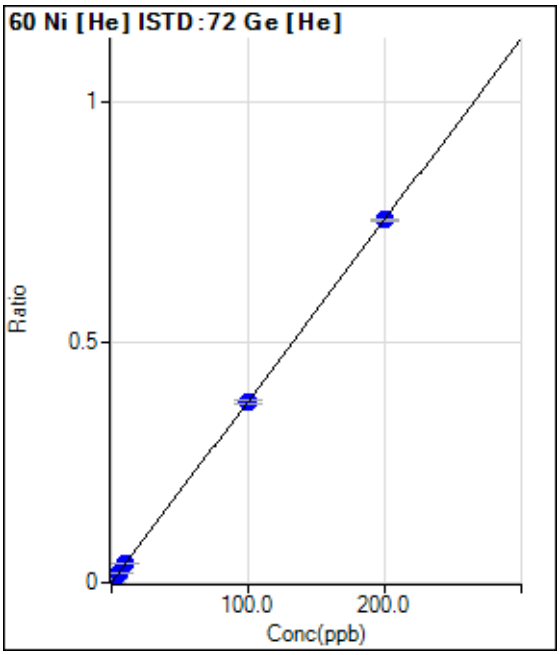


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	410.02	0.0002	P	25.0
2	☐	2.000	2.001	8776.32	0.0053	P	1.8
3	☐	5.000	5.131	21624.22	0.0131	P	3.0
4	☐	10.000	10.498	43593.45	0.0266	P	2.2
5	☐	100.000	100.525	415025.97	0.2527	P	2.4
6	☐	200.000	199.709	807143.95	0.5019	P	2.4

y = 0.0025 * x + 2.4812E-004
R = 1.0000
DL = 0.07402
BEC = 0.09878

Weight: <None>
Min Conc: <None>

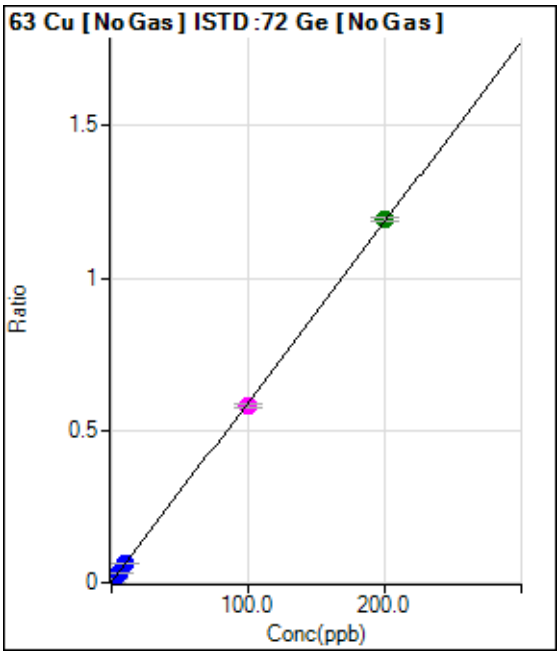
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	203.34	0.0005	P	8.1
2	☐	2.000	1.984	3550.51	0.0079	P	6.3
3	☐	5.000	5.176	8889.70	0.0200	P	0.7
4	☐	10.000	10.544	17988.88	0.0402	P	0.5
5	☐	100.000	99.981	170217.95	0.3775	P	2.1
6	☐	200.000	199.978	332895.06	0.7546	P	0.2

y = 0.0038 * x + 4.5617E-004
R = 1.0000
DL = 0.0295
BEC = 0.121

Weight: <None>
Min Conc: <None>

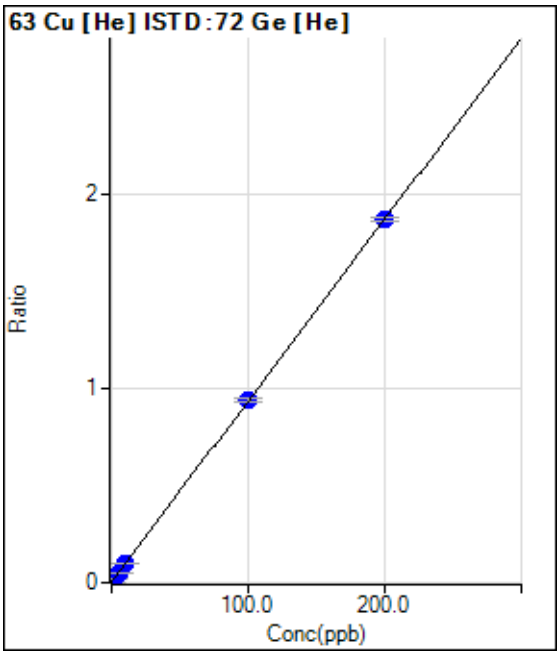


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2436.93	0.0015	P	3.7
2	☐	2.000	1.916	21300.41	0.0128	P	3.9
3	☐	5.000	4.913	50239.73	0.0305	P	2.3
4	☐	10.000	10.150	100691.68	0.0615	P	1.5
5	☐	100.000	97.724	951002.64	0.5791	M	2.7
6	☐	200.000	201.133	1914836.38	1.1904	A	1.0

y = 0.0059 * x + 0.0015
R = 0.9999
DL = 0.0277
BEC = 0.2497

Weight: <None>
Min Conc: <None>

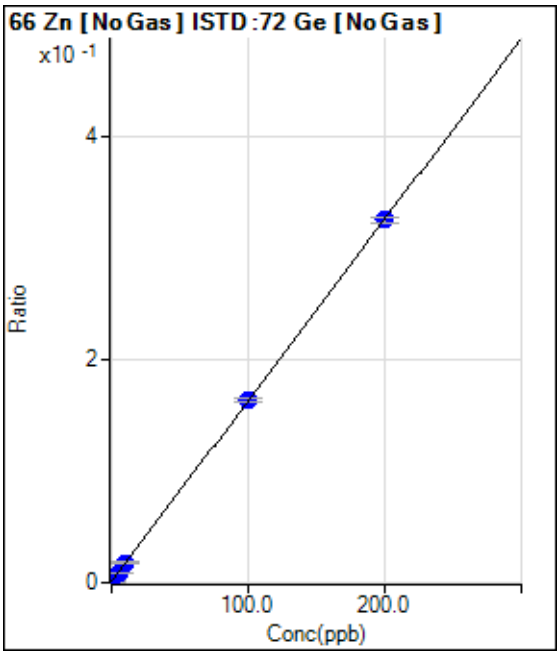
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1110.07	0.0025	P	6.2
2	☐	2.000	1.970	9363.40	0.0209	P	1.0
3	☐	5.000	5.000	21921.35	0.0493	P	0.9
4	☐	10.000	10.441	44804.15	0.1002	P	1.0
5	☐	100.000	100.315	424314.26	0.9410	P	1.9
6	☐	200.000	199.821	825861.99	1.8720	P	1.0

y = 0.0094 * x + 0.0025
R = 1.0000
DL = 0.04938
BEC = 0.266

Weight: <None>
Min Conc: <None>

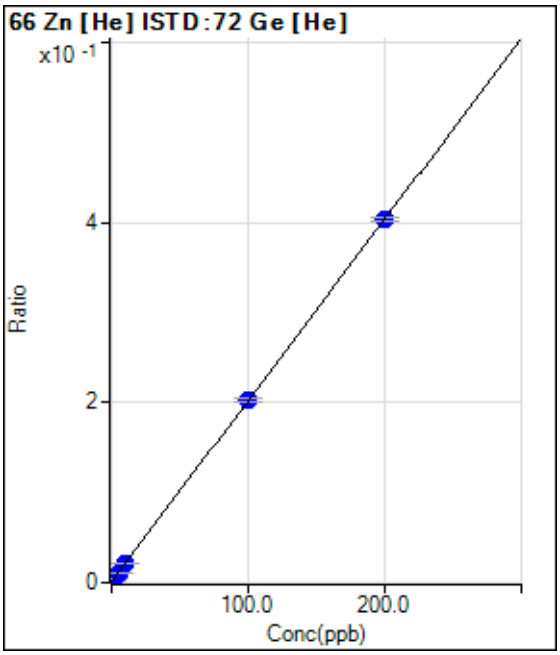


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1476.77	0.0009	P	8.4
2	☐	2.000	2.219	7478.87	0.0045	P	2.8
3	☐	5.000	4.960	14721.58	0.0089	P	5.7
4	☐	10.000	10.601	29636.13	0.0181	P	3.1
5	☐	100.000	100.140	268287.76	0.1634	P	2.1
6	☐	200.000	199.899	523135.51	0.3252	P	1.6

y = 0.0016 * x + 8.9532E-004
R = 1.0000
DL = 0.1384
BEC = 0.5518

Weight: <None>
Min Conc: <None>

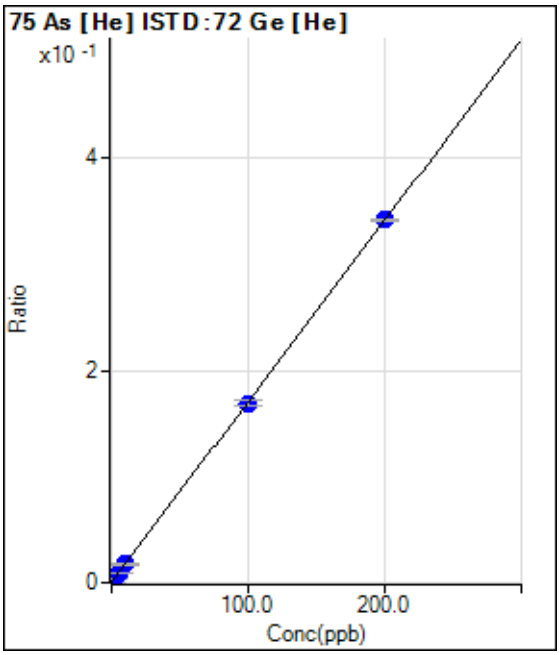
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	536.69	0.0012	P	16.5
2	☐	2.000	1.931	2276.90	0.0051	P	6.4
3	☐	5.000	5.082	5084.39	0.0114	P	4.2
4	☐	10.000	10.413	9913.74	0.0222	P	0.5
5	☐	100.000	100.402	91678.41	0.2033	P	1.5
6	☐	200.000	199.777	177933.42	0.4034	P	1.0

y = 0.0020 * x + 0.0012
R = 1.0000
DL = 0.2958
BEC = 0.5973

Weight: <None>
Min Conc: <None>

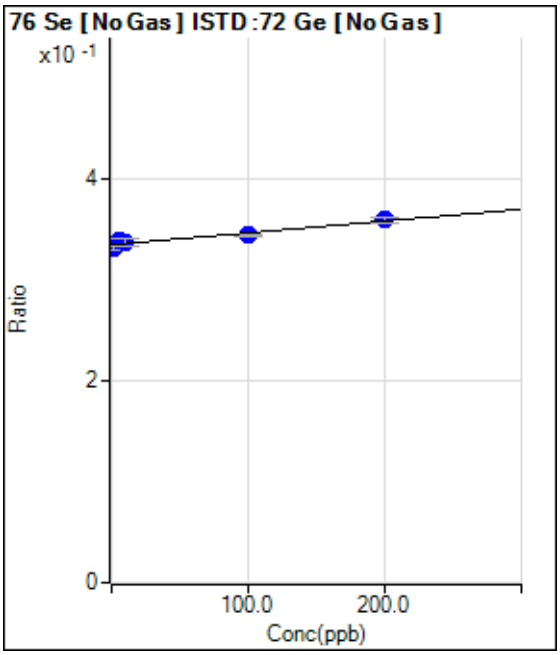


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	188.89	0.0004	P	18.4
2	☐	2.000	2.170	1843.47	0.0041	P	5.0
3	☐	5.000	4.850	3863.90	0.0087	P	3.0
4	☐	10.000	9.942	7762.27	0.0174	P	3.1
5	☐	100.000	99.184	76345.71	0.1693	P	2.2
6	☐	200.000	200.413	150737.53	0.3417	P	0.5

y = 0.0017 * x + 4.2414E-004
R = 1.0000
DL = 0.1376
BEC = 0.2491

Weight: <None>
Min Conc: <None>

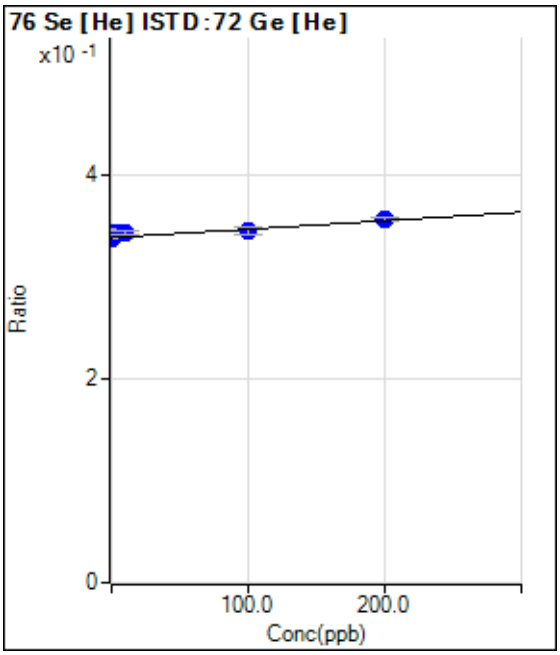
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	553489.55	0.3352	P	1.9
2	☐	2.000	-24.096	552982.95	0.3324	P	1.3
3	☐	5.000	27.948	557251.24	0.3385	P	1.3
4	☐	10.000	21.952	553266.97	0.3378	P	2.0
5	☐	100.000	79.813	565876.10	0.3446	P	0.6
6	☐	200.000	209.183	578582.65	0.3597	P	1.3

y = 1.1702E-004 * x + 0.3352
R = 0.9737
DL = 159.7
BEC = 2865

Weight: <None>
Min Conc: <None>

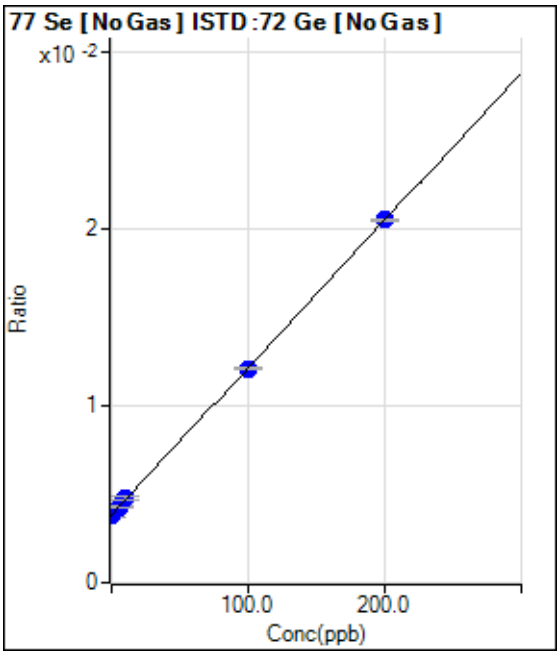


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	151214.33	0.3392	P	2.0
2	☐	2.000	62.886	154131.23	0.3444	P	1.0
3	☐	5.000	46.194	152585.58	0.3430	P	2.7
4	☐	10.000	53.558	153702.19	0.3436	P	0.9
5	☐	100.000	75.313	155759.00	0.3454	P	2.3
6	☐	200.000	208.527	157279.96	0.3565	P	1.2

y = 8.3218E-005 * x + 0.3392
R = 0.9208
DL = 239.2
BEC = 4076

Weight: <None>
Min Conc: <None>

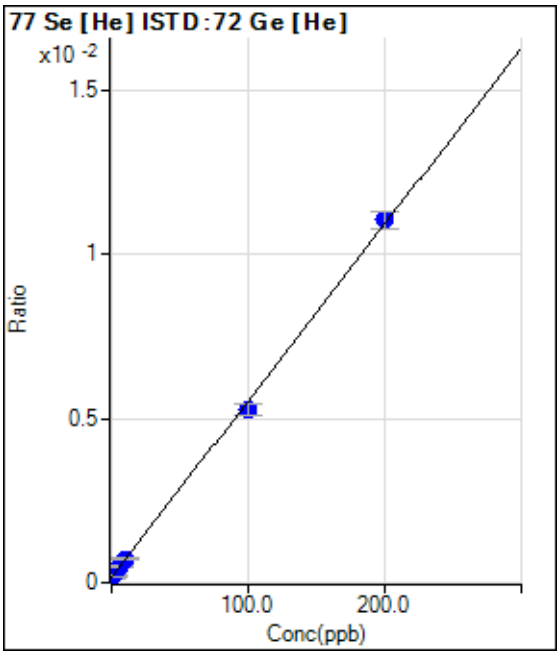
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6324.95	0.0038	P	4.4
2	☐	2.000	2.381	6705.12	0.0040	P	2.3
3	☐	5.000	5.197	7021.94	0.0043	P	1.9
4	☐	10.000	11.442	7835.72	0.0048	P	2.7
5	☐	100.000	99.456	19891.60	0.0121	P	0.7
6	☐	200.000	200.191	32973.99	0.0205	P	0.7

y = 8.3252E-005 * x + 0.0038
R = 1.0000
DL = 6.077
BEC = 46.03

Weight: <None>
Min Conc: <None>

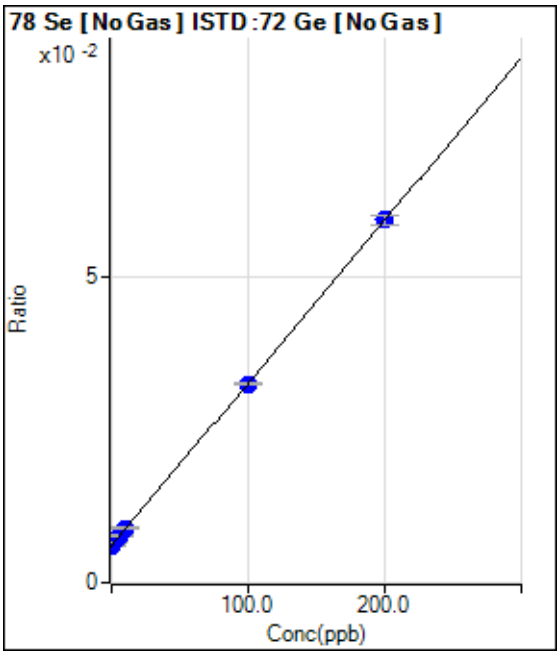


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	73.33	0.0002	P	42.7
2	☐	2.000	1.090	100.00	0.0002	P	27.0
3	☐	5.000	5.983	216.67	0.0005	P	12.3
4	☐	10.000	10.395	323.34	0.0007	P	12.6
5	☐	100.000	94.761	2366.92	0.0053	P	6.3
6	☐	200.000	202.584	4867.66	0.0110	P	4.9

y = 5.3660E-005 * x + 1.6520E-004
R = 0.9995
DL = 3.946
BEC = 3.079

Weight: <None>
Min Conc: <None>

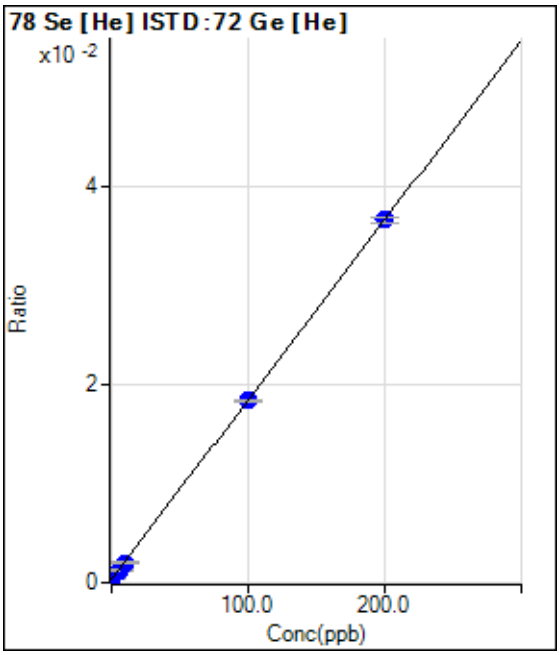
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10027.23	0.0061	P	6.1
2	☐	2.000	2.155	11058.06	0.0066	P	3.1
3	☐	5.000	5.960	12609.41	0.0077	P	3.1
4	☐	10.000	10.635	14584.79	0.0089	P	1.7
5	☐	100.000	99.363	53419.30	0.0325	P	0.5
6	☐	200.000	200.261	95503.94	0.0594	P	2.8

y = 2.6621E-004 * x + 0.0061
R = 1.0000
DL = 4.188
BEC = 22.81

Weight: <None>
Min Conc: <None>

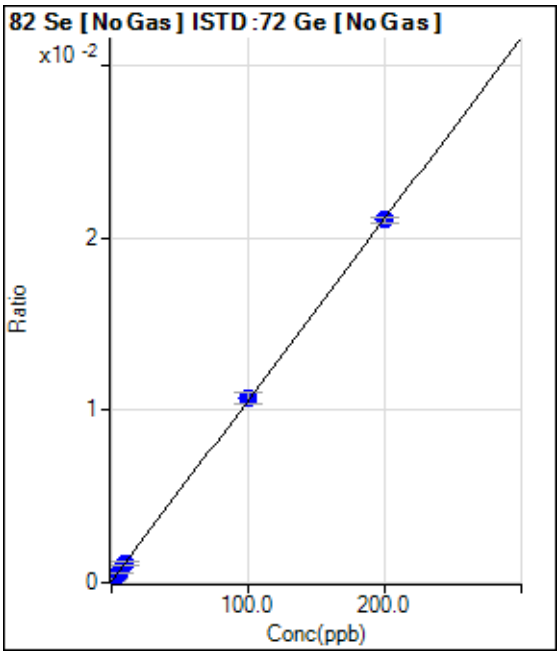


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	149.33	0.0003	P	0.2
2	☐	2.000	2.075	318.00	0.0007	P	4.4
3	☐	5.000	4.992	550.68	0.0012	P	8.2
4	☐	10.000	9.354	907.37	0.0020	P	4.6
5	☐	100.000	99.668	8289.24	0.0184	P	0.9
6	☐	200.000	200.198	16140.34	0.0366	P	1.6

y = 1.8108E-004 * x + 3.3489E-004
R = 1.0000
DL = 0.009386
BEC = 1.849

Weight: <None>
Min Conc: <None>

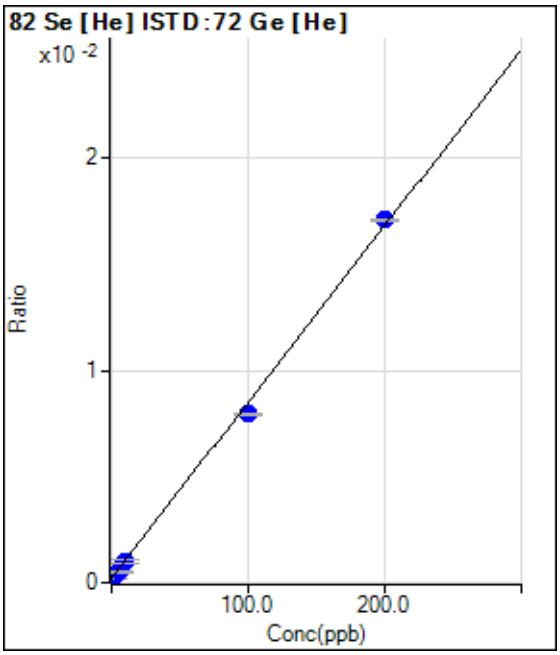
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.39	0.0001	P	44.0
2	☐	2.000	1.627	427.77	0.0003	P	21.3
3	☐	5.000	4.386	900.91	0.0005	P	2.7
4	☐	10.000	9.980	1861.38	0.0011	P	13.8
5	☐	100.000	100.958	17570.57	0.0107	P	6.0
6	☐	200.000	199.541	33888.37	0.0211	P	1.5

y = 1.0516E-004 * x + 8.5955E-005
R = 1.0000
DL = 1.078
BEC = 0.8174

Weight: <None>
Min Conc: <None>

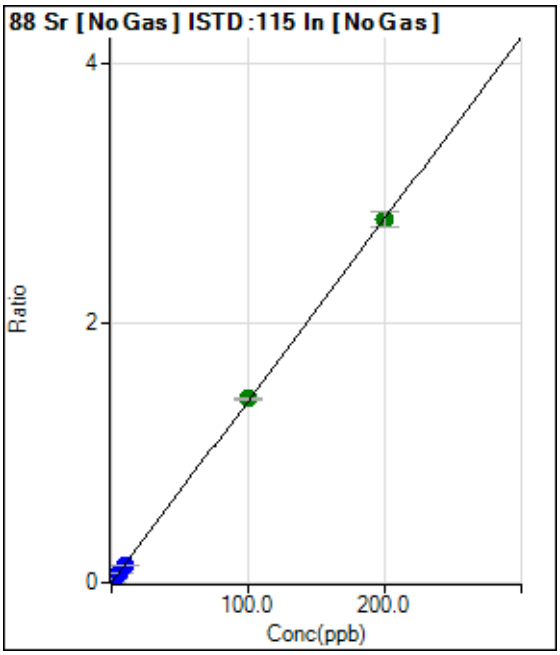


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.33	0.0002	P	25.3
2	☐	2.000	0.994	130.00	0.0003	P	51.3
3	☐	5.000	3.537	223.34	0.0005	P	7.0
4	☐	10.000	9.337	440.02	0.0010	P	13.7
5	☐	100.000	93.305	3587.20	0.0080	P	0.9
6	☐	200.000	203.428	7542.26	0.0171	P	0.7

y = 8.3017E-005 * x + 2.0875E-004
R = 0.9993
DL = 1.909
BEC = 2.515

Weight: <None>
Min Conc: <None>

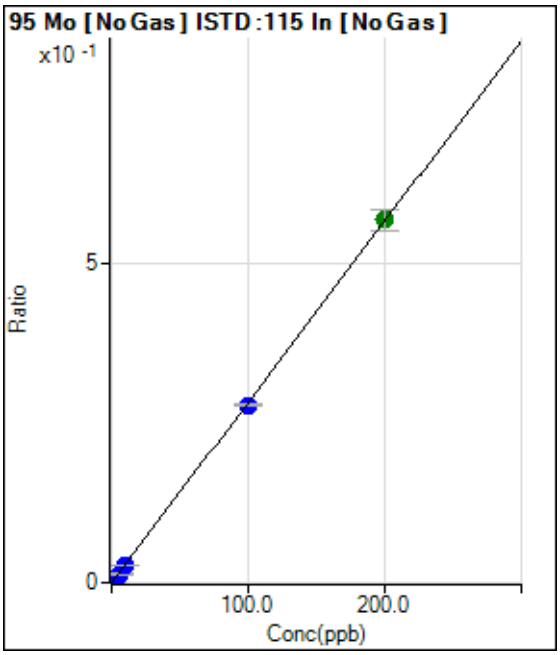
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	960.05	0.0005	P	16.0
2	☐	2.000	1.970	50512.04	0.0281	P	1.6
3	☐	5.000	4.913	124119.42	0.0692	P	2.0
4	☐	10.000	9.919	253823.07	0.1393	P	1.2
5	☐	100.000	101.052	2510481.63	1.4139	A	1.6
6	☐	200.000	199.481	4878672.53	2.7906	A	4.3

y = 0.0140 * x + 5.2830E-004
R = 1.0000
DL = 0.01812
BEC = 0.03777

Weight: <None>
Min Conc: <None>

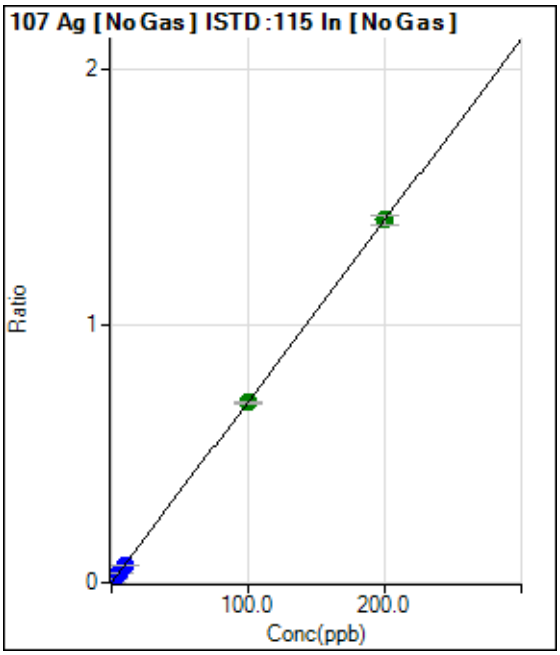


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	160.00	0.0001	P	39.7
2	☐	2.000	1.959	10114.05	0.0056	P	2.5
3	☐	5.000	4.754	24239.11	0.0135	P	0.8
4	☐	10.000	9.608	49632.65	0.0272	P	3.4
5	☐	100.000	98.251	493075.03	0.2777	P	0.9
6	☐	200.000	200.901	992250.17	0.5677	A	6.0

y = 0.0028 * x + 8.8156E-005
R = 0.9999
DL = 0.03714
BEC = 0.0312

Weight: <None>
Min Conc: <None>

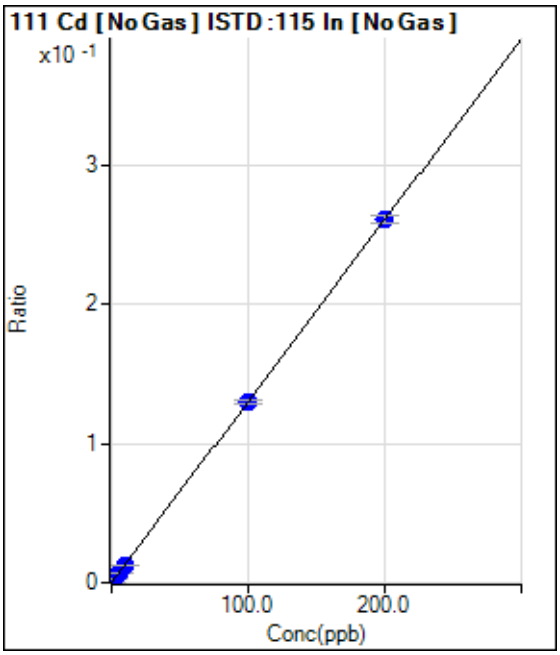
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	273.34	0.0002	P	12.4
2	☐	2.000	1.970	25230.97	0.0140	P	3.4
3	☐	5.000	4.827	61205.08	0.0341	P	2.0
4	☐	10.000	9.768	125656.80	0.0690	P	1.7
5	☐	100.000	99.436	1243848.00	0.7006	A	1.7
6	☐	200.000	200.298	2467270.85	1.4110	A	2.9

y = 0.0070 * x + 1.5040E-004
R = 1.0000
DL = 0.007962
BEC = 0.02135

Weight: <None>
Min Conc: <None>

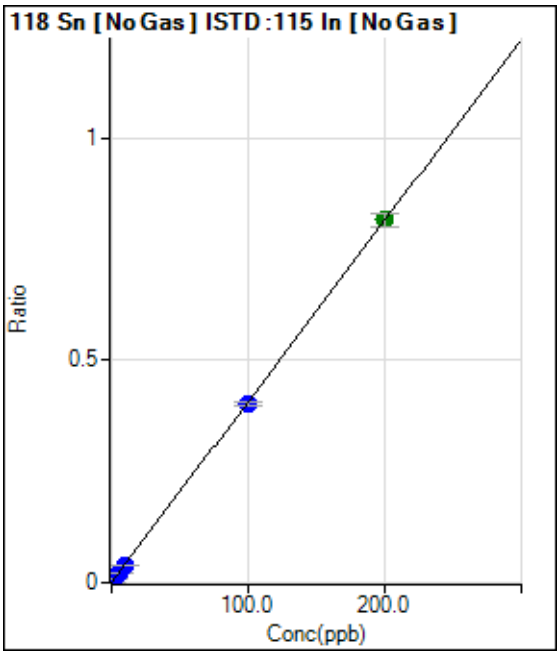


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.09	0.0000	P	519.1
2	☐	2.000	2.091	4897.53	0.0027	P	6.2
3	☐	5.000	4.917	11472.65	0.0064	P	2.1
4	☐	10.000	10.039	23816.03	0.0131	P	0.6
5	☐	100.000	99.744	230457.92	0.1298	P	2.5
6	☐	200.000	200.127	455494.20	0.2605	P	2.1

y = 0.0013 * x + 1.6415E-006
R = 1.0000
DL = 0.01964
BEC = 0.001261

Weight: <None>
Min Conc: <None>

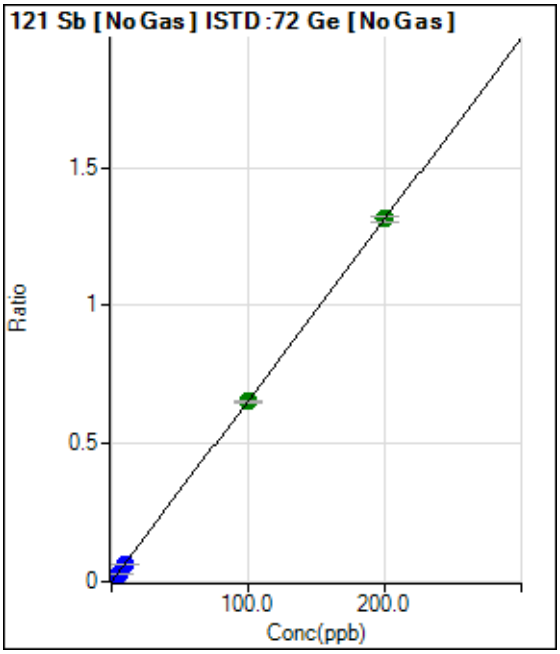
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1126.74	0.0006	P	10.3
2	☐	2.000	1.921	15159.02	0.0084	P	4.6
3	☐	5.000	4.940	37096.21	0.0207	P	1.8
4	☐	10.000	9.795	73686.40	0.0404	P	0.6
5	☐	100.000	99.225	717080.82	0.4039	P	2.2
6	☐	200.000	200.400	1425150.03	0.8151	A	3.6

y = 0.0041 * x + 6.1972E-004
R = 1.0000
DL = 0.04695
BEC = 0.1525

Weight: <None>
Min Conc: <None>

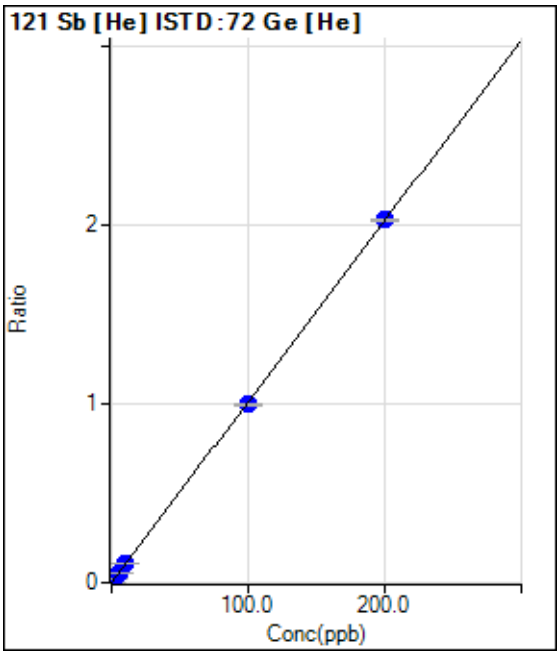


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	130.00	0.0001	P	47.7
2	☐	2.000	1.974	21668.32	0.0130	P	1.0
3	☐	5.000	4.710	50979.60	0.0310	P	2.0
4	☐	10.000	9.972	107236.83	0.0655	P	1.7
5	☐	100.000	99.410	1070641.34	0.6519	A	1.4
6	☐	200.000	200.304	2112681.53	1.3135	A	1.8

y = 0.0066 * x + 7.9130E-005
R = 1.0000
DL = 0.01725
BEC = 0.01207

Weight: <None>
Min Conc: <None>

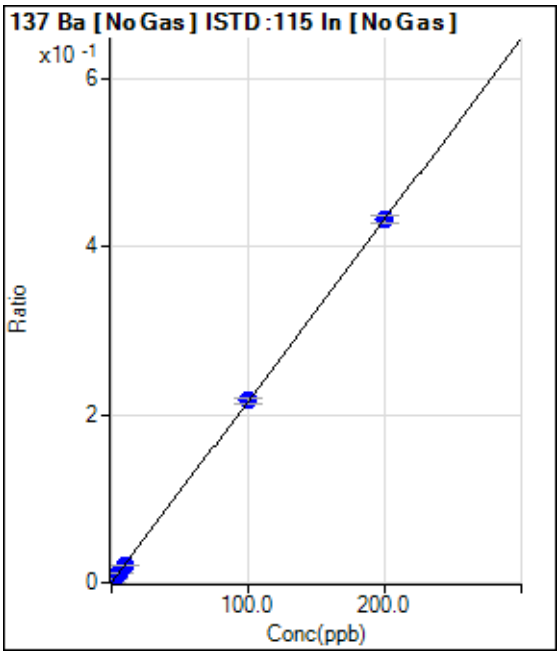
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	73.33	0.0002	P	78.2
2	☐	2.000	2.027	9250.11	0.0207	P	5.3
3	☐	5.000	4.881	22042.15	0.0496	P	4.0
4	☐	10.000	10.175	46134.77	0.1031	P	1.1
5	☐	100.000	98.676	450410.24	0.9988	P	0.7
6	☐	200.000	200.656	895929.34	2.0310	P	0.6

y = 0.0101 * x + 1.6304E-004
R = 1.0000
DL = 0.03779
BEC = 0.01611

Weight: <None>
Min Conc: <None>

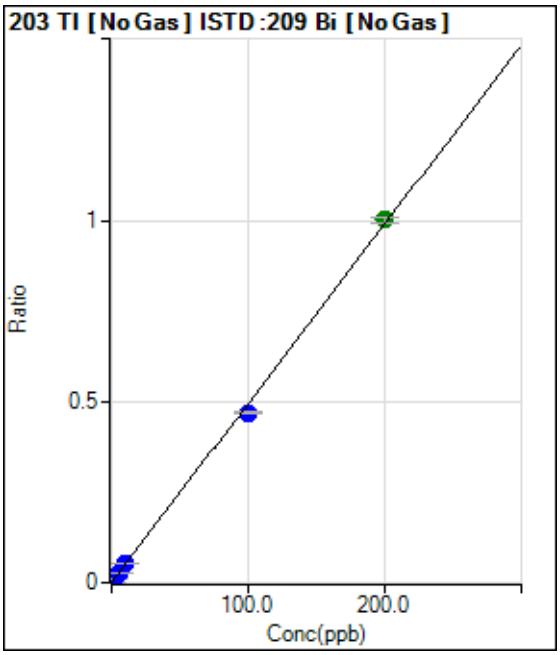


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.34	0.0001	P	6.2
2	☐	2.000	1.974	7932.55	0.0044	P	5.8
3	☐	5.000	5.009	19671.86	0.0110	P	1.2
4	☐	10.000	9.824	38975.53	0.0214	P	0.7
5	☐	100.000	100.188	384781.21	0.2167	P	2.3
6	☐	200.000	199.915	756073.03	0.4323	P	2.1

y = 0.0022 * x + 1.4484E-004
R = 1.0000
DL = 0.01237
BEC = 0.067

Weight: <None>
Min Conc: <None>

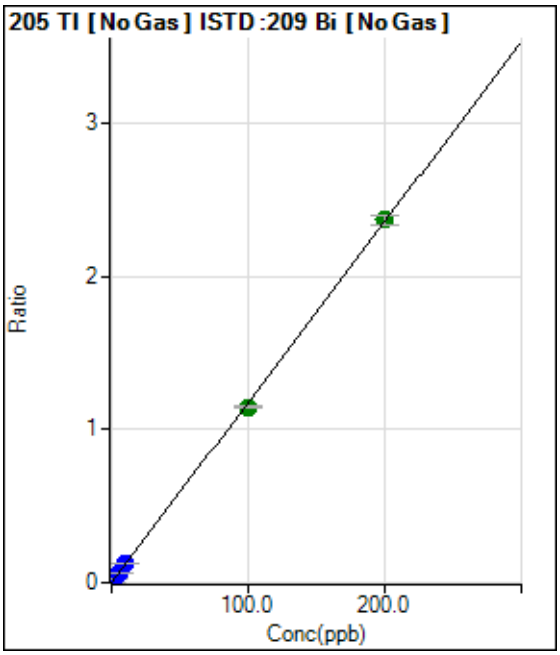
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	766.71	0.0005	P	10.2
2	☐	2.000	2.124	17319.06	0.0110	P	4.4
3	☐	5.000	5.299	43536.24	0.0267	P	1.7
4	☐	10.000	10.703	85293.95	0.0534	P	1.7
5	☐	100.000	94.931	754834.94	0.4696	P	0.6
6	☐	200.000	202.491	1553010.24	1.0011	A	1.5

y = 0.0049 * x + 4.8594E-004
R = 0.9995
DL = 0.03001
BEC = 0.09833

Weight: <None>
Min Conc: <None>

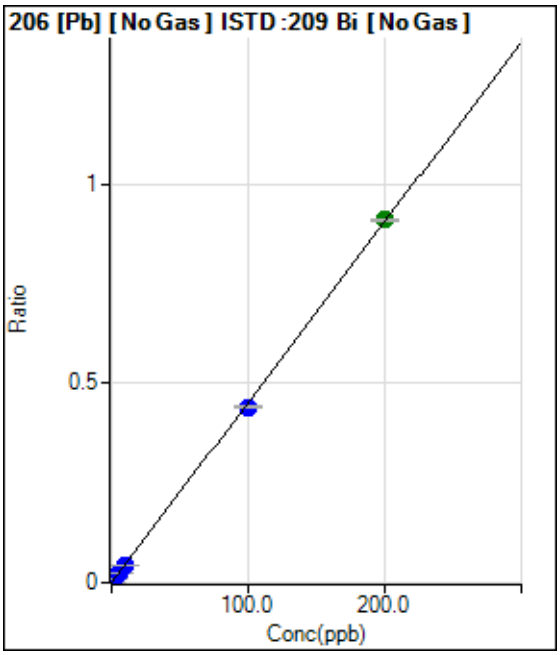


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1643.48	0.0010	P	4.6
2	☐	2.000	2.187	42312.26	0.0268	P	1.8
3	☐	5.000	5.295	103547.81	0.0634	P	3.1
4	☐	10.000	10.768	204429.05	0.1279	P	1.6
5	☐	100.000	97.454	1847792.32	1.1495	A	0.7
6	☐	200.000	201.226	3679637.55	2.3724	A	2.6

y = 0.0118 * x + 0.0010
R = 0.9999
DL = 0.01209
BEC = 0.08842

Weight: <None>
Min Conc: <None>

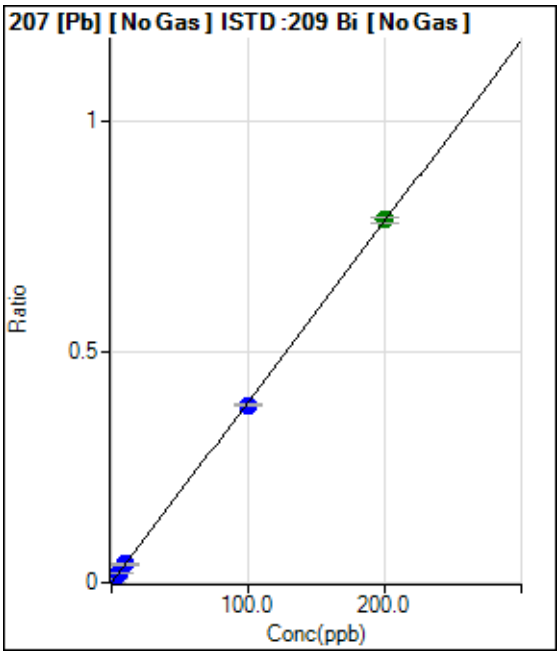
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	286.68	0.0002	P	21.9
2	☐	2.000	1.997	14518.63	0.0092	P	2.6
3	☐	5.000	4.874	36229.83	0.0222	P	2.6
4	☐	10.000	10.043	72785.65	0.0455	P	0.6
5	☐	100.000	97.345	707029.16	0.4399	P	1.3
6	☐	200.000	201.329	1411047.48	0.9096	A	0.6

y = 0.0045 * x + 1.8233E-004
R = 0.9999
DL = 0.02652
BEC = 0.04037

Weight: <None>
Min Conc: <None>

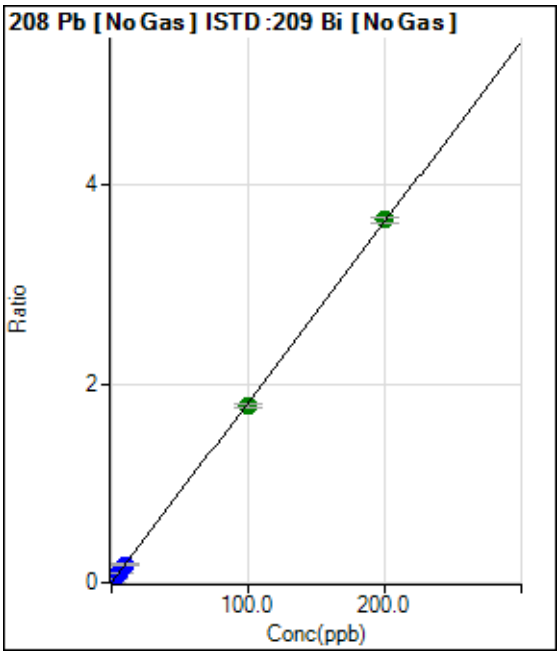


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	233.34	0.0001	P	28.9
2	☐	2.000	2.002	12596.59	0.0080	P	5.4
3	☐	5.000	4.907	31580.40	0.0193	P	1.8
4	☐	10.000	10.140	63622.48	0.0398	P	3.9
5	☐	100.000	98.394	619073.66	0.3851	P	1.2
6	☐	200.000	200.798	1218965.09	0.7858	A	1.7

y = 0.0039 * x + 1.4831E-004
R = 1.0000
DL = 0.03288
BEC = 0.0379

Weight: <None>
Min Conc: <None>

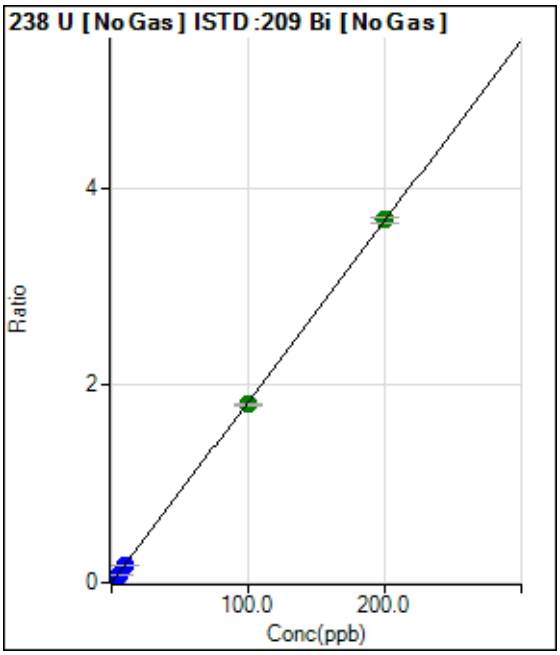
Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1036.70	0.0007	P	12.1
2	☐	2.000	2.009	58545.32	0.0371	P	1.4
3	☐	5.000	4.826	143966.43	0.0882	P	2.5
4	☐	10.000	10.040	292080.46	0.1828	P	2.4
5	☐	100.000	97.770	2851971.03	1.7743	A	1.7
6	☐	200.000	201.117	5660511.90	3.6492	A	1.7

y = 0.0181 * x + 6.5831E-004
R = 0.9999
DL = 0.01316
BEC = 0.03629

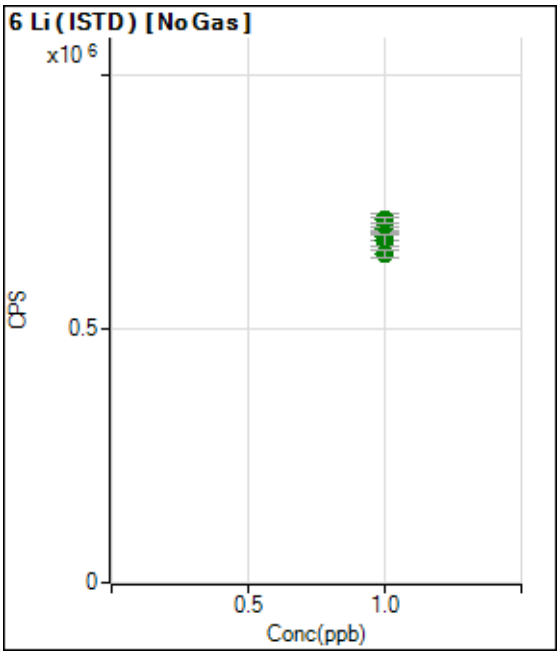
Weight: <None>
Min Conc: <None>



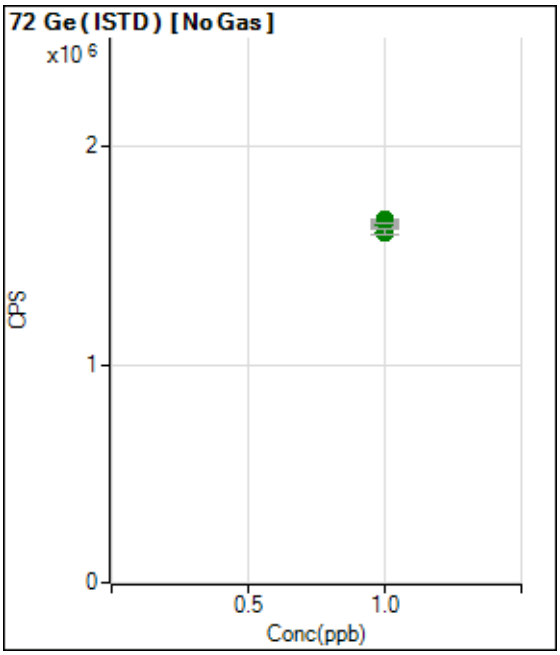
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	60.00	0.0000	P	30.1
2	☐	2.000	1.956	56588.20	0.0359	P	0.6
3	☐	5.000	4.660	139307.21	0.0854	P	2.2
4	☐	10.000	9.838	287860.36	0.1802	P	2.5
5	☐	100.000	98.675	2903774.33	1.8066	A	1.2
6	☐	200.000	200.679	5699163.25	3.6741	A	1.9

y = 0.0183 * x + 3.8149E-005
R = 1.0000
DL = 0.001882
BEC = 0.002084

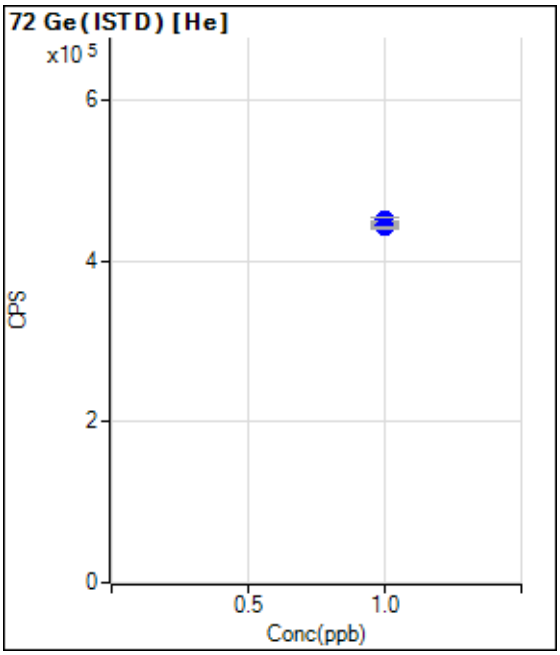
Weight: <None>
Min Conc: <None>



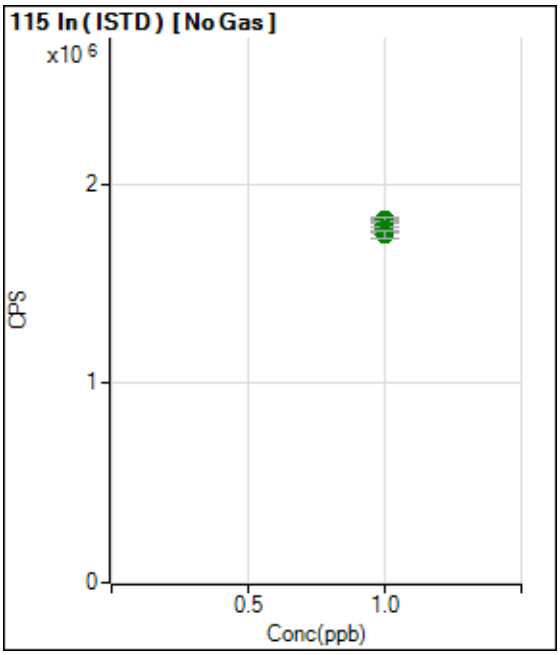
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		709618.94		A	4.9
2	☐	1.000		697970.69		A	1.1
3	☐	1.000		714558.31		A	1.9
4	☐	1.000		682365.03		A	2.2
5	☐	1.000		674683.02		A	3.7
6	☐	1.000		647735.25		A	1.8



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1651482.22		A	2.2
2	☐	1.000		1663622.99		A	0.4
3	☐	1.000		1646335.24		A	0.9
4	☐	1.000		1638277.16		A	2.0
5	☐	1.000		1642360.71		A	1.0
6	☐	1.000		1608707.89		A	1.7

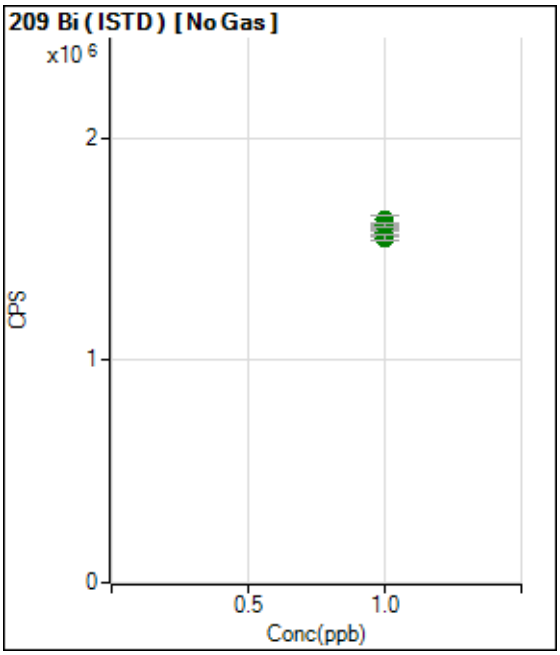


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		445920.07		P	1.7
2	☐	1.000		447517.49		P	0.9
3	☐	1.000		444959.43		P	2.0
4	☐	1.000		447282.71		P	0.1
5	☐	1.000		450948.26		P	0.9
6	☐	1.000		441148.98		P	1.0



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1818499.57		A	1.1
2	☐	1.000		1798815.50		A	1.2
3	☐	1.000		1792783.60		A	2.3
4	☐	1.000		1822601.43		A	1.2
5	☐	1.000		1775707.82		A	1.5
6	☐	1.000		1749410.58		A	2.5

Calibration for 022_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1577939.04		A	2.5
2	☐	1.000		1578283.36		A	2.3
3	☐	1.000		1632632.27		A	2.2
4	☐	1.000		1598128.00		A	1.3
5	☐	1.000		1607422.63		A	0.9
6	☐	1.000		1551430.60		A	1.6

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	015CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:22:28-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	46249	0.01
Be	9	1	No Gas	55	59.60
V	51	2	He	3320	0.09
Cr	52	2	He	9313	0.03
Fe	56	2	He	18673	0.00
Se	78	2	He	149	1.04
As	75	2	He	189	9.22
Ca	44	2	He	727	0.97
Na	23	2	He	86960	0.00
Mg	24	2	He	553	2.36
K	39	2	He	134783	0.00
Mn	55	2	He	2120	0.37
Co	59	2	He	257	2.32
Ni	60	2	He	203	3.70
Cu	63	2	He	1110	0.66
Zn	66	2	He	537	3.23
Al	27	2	He	893	0.32
B	11	1	No Gas	7274	0.01
Al	27	1	No Gas	30129	0.08
Si	28	1	No Gas	455535	0.00
Ag	107	1	No Gas	273	4.30
Cd	111	1	No Gas	3	16334.44
Sr	88	1	No Gas	960	1.60
Mo	95	1	No Gas	160	24.40
Sn	118	1	No Gas	1127	0.89
Sb	121	1	No Gas	130	35.99
Ba	137	1	No Gas	263	2.20
Tl	205	1	No Gas	1643	0.21
Tl	203	1	No Gas	767	1.36
Pb	208	1	No Gas	1037	0.91
U	238	1	No Gas	60	48.11
Ca	43	2	He	33	226.50
Sb	121	2	He	73	108.96
Ti	47	2	He	20	500.00
Cu	63	1	No Gas	2437	0.11

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	709619	4.86
Ge	72	2	He	445920	1.71
Ge	72	1	No Gas	1651482	2.23
In	115	1	No Gas	1818500	1.07

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1577939	2.48

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	016CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:24:25-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	6878	0.03
V	51	2	He	13013	0.01
Cr	52	2	He	20112	0.02
Fe	56	2	He	1006973	0.00
Se	78	2	He	318	1.43
As	75	2	He	1843	0.25
Ca	44	2	He	8620	0.04
Na	23	2	He	284565	0.00
Mg	24	2	He	125885	0.00
K	39	2	He	295505	0.00
Mn	55	2	He	10684	0.04
Co	59	2	He	14104	0.02
Ni	60	2	He	3551	0.15
Cu	63	2	He	9363	0.02
Zn	66	2	He	2277	0.25
Al	27	2	He	1657	0.43
B	11	1	No Gas	26659	0.01
Al	27	1	No Gas	52824	0.00
Si	28	1	No Gas	529164	0.00
Ag	107	1	No Gas	25231	0.01
Cd	111	1	No Gas	4898	0.13
Sr	88	1	No Gas	50512	0.00
Mo	95	1	No Gas	10114	0.02
Sn	118	1	No Gas	15159	0.03
Sb	121	1	No Gas	21668	0.00
Ba	137	1	No Gas	7933	0.06
Tl	205	1	No Gas	42312	0.00
Tl	203	1	No Gas	17319	0.01
Pb	208	1	No Gas	58545	0.00
U	238	1	No Gas	56588	0.00
Ca	43	2	He	473	4.81
Sb	121	2	He	9250	0.05
Cu	63	1	No Gas	21300	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697971	1.11	709619	98.36	70	120	
Ge	72	2	He	447517	0.87	445920	100.36	70	120	
Ge	72	1	No Gas	1663623	0.37	1651482	100.74	70	120	

Calibration Standard Report

In	115	1	No Gas	1798816	1.18	1818500	98.92	70	120	
Bi	209	1	No Gas	1578283	2.29	1577939	100.02	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	017CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:26:31-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16862	0.00
V	51	2	He	26877	0.00
Cr	52	2	He	35824	0.00
Fe	56	2	He	2403080	0.00
Se	78	2	He	551	1.19
As	75	2	He	3864	0.10
Ca	44	2	He	20172	0.01
Na	23	2	He	572491	0.00
Mg	24	2	He	309973	0.00
K	39	2	He	532195	0.00
Mn	55	2	He	23253	0.01
Co	59	2	He	35928	0.00
Ni	60	2	He	8890	0.03
Cu	63	2	He	21921	0.01
Zn	66	2	He	5084	0.05
Al	27	2	He	3070	0.28
B	11	1	No Gas	54547	0.00
Al	27	1	No Gas	88518	0.00
Si	28	1	No Gas	630134	0.00
Ag	107	1	No Gas	61205	0.00
Cd	111	1	No Gas	11473	0.01
Sr	88	1	No Gas	124119	0.00
Mo	95	1	No Gas	24239	0.01
Sn	118	1	No Gas	37096	0.00
Sb	121	1	No Gas	50980	0.00
Ba	137	1	No Gas	19672	0.01
Tl	205	1	No Gas	103548	0.00
Tl	203	1	No Gas	43536	0.00
Pb	208	1	No Gas	143966	0.00
U	238	1	No Gas	139307	0.00
Ca	43	2	He	1250	0.78
Sb	121	2	He	22042	0.01
Cu	63	1	No Gas	50240	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	714558	1.87	709619	100.70	70	120	
Ge	72	2	He	444959	1.97	445920	99.78	70	120	
Ge	72	1	No Gas	1646335	0.90	1651482	99.69	70	120	

Calibration Standard Report

In	115	1	No Gas	1792784	2.31	1818500	98.59	70	120	
Bi	209	1	No Gas	1632632	2.24	1577939	103.47	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	018CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:28:27-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	34617	0.00
V	51	2	He	51940	0.00
Cr	52	2	He	63829	0.00
Fe	56	2	He	4856129	0.00
Se	78	2	He	907	0.49
As	75	2	He	7762	0.04
Ca	44	2	He	40757	0.01
Na	23	2	He	1053688	0.00
Mg	24	2	He	635333	0.00
K	39	2	He	944676	0.00
Mn	55	2	He	45108	0.01
Co	59	2	He	72134	0.00
Ni	60	2	He	17989	0.00
Cu	63	2	He	44804	0.00
Zn	66	2	He	9914	0.01
Al	27	2	He	6038	0.03
B	11	1	No Gas	104042	0.00
Al	27	1	No Gas	187167	0.00
Si	28	1	No Gas	832038	0.00
Ag	107	1	No Gas	125657	0.00
Cd	111	1	No Gas	23816	0.00
Sr	88	1	No Gas	253823	0.00
Mo	95	1	No Gas	49633	0.01
Sn	118	1	No Gas	73686	0.00
Sb	121	1	No Gas	107237	0.00
Ba	137	1	No Gas	38976	0.00
Tl	205	1	No Gas	204429	0.00
Tl	203	1	No Gas	85294	0.00
Pb	208	1	No Gas	292080	0.00
U	238	1	No Gas	287860	0.00
Ca	43	2	He	2267	0.16
Sb	121	2	He	46135	0.00
Cu	63	1	No Gas	100692	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	682365	2.23	709619	96.16	70	120	
Ge	72	2	He	447283	0.12	445920	100.31	70	120	
Ge	72	1	No Gas	1638277	2.02	1651482	99.20	70	120	

Calibration Standard Report

In	115	1	No Gas	1822601	1.18	1818500	100.23	70	120	
Bi	209	1	No Gas	1598128	1.30	1577939	101.28	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	019CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:30:22-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	337044	0.00
V	51	2	He	484928	0.00
Cr	52	2	He	528528	0.00
Fe	56	2	He	46804956	0.00
Se	78	2	He	8289	0.01
As	75	2	He	76346	0.00
Ca	44	2	He	390884	0.00
Na	23	2	He	9027045	0.00
Mg	24	2	He	5739006	0.00
K	39	2	He	7757722	0.00
Mn	55	2	He	415735	0.00
Co	59	2	He	693866	0.00
Ni	60	2	He	170218	0.00
Cu	63	2	He	424314	0.00
Zn	66	2	He	91678	0.00
Al	27	2	He	43923	0.00
B	11	1	No Gas	925885	0.00
Al	27	1	No Gas	1322031	0.00
Si	28	1	No Gas	3807676	0.00
Ag	107	1	No Gas	1243848	0.00
Cd	111	1	No Gas	230458	0.00
Sr	88	1	No Gas	2510482	0.00
Mo	95	1	No Gas	493075	0.00
Sn	118	1	No Gas	717081	0.00
Sb	121	1	No Gas	1070641	0.00
Ba	137	1	No Gas	384781	0.00
Tl	205	1	No Gas	1847792	0.00
Tl	203	1	No Gas	754835	0.00
Pb	208	1	No Gas	2851971	0.00
U	238	1	No Gas	2903774	0.00
Ca	43	2	He	22332	0.01
Sb	121	2	He	450410	0.00
Cu	63	1	No Gas	951003	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	674683	3.70	709619	95.08	70	120	
Ge	72	2	He	450948	0.93	445920	101.13	70	120	
Ge	72	1	No Gas	1642361	0.97	1651482	99.45	70	120	

Calibration Standard Report

In	115	1	No Gas	1775708	1.47	1818500	97.65	70	120	
Bi	209	1	No Gas	1607423	0.88	1577939	101.87	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	020CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:32:32-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	673415	0.00
V	51	2	He	936266	0.00
Cr	52	2	He	1033843	0.00
Fe	56	2	He	91791482	0.00
Se	78	2	He	16140	0.01
As	75	2	He	150738	0.00
Ca	44	2	He	769485	0.00
Na	23	2	He	18022091	0.00
Mg	24	2	He	11227839	0.00
K	39	2	He	15143691	0.00
Mn	55	2	He	810623	0.00
Co	59	2	He	1382350	0.00
Ni	60	2	He	332895	0.00
Cu	63	2	He	825862	0.00
Zn	66	2	He	177933	0.00
Al	27	2	He	85103	0.00
B	11	1	No Gas	1848732	0.00
Al	27	1	No Gas	2528101	0.00
Si	28	1	No Gas	7049298	0.00
Ag	107	1	No Gas	2467271	0.00
Cd	111	1	No Gas	455494	0.00
Sr	88	1	No Gas	4878673	0.00
Mo	95	1	No Gas	992250	0.00
Sn	118	1	No Gas	1425150	0.00
Sb	121	1	No Gas	2112682	0.00
Ba	137	1	No Gas	756073	0.00
Tl	205	1	No Gas	3679638	0.00
Tl	203	1	No Gas	1553010	0.00
Pb	208	1	No Gas	5660512	0.00
U	238	1	No Gas	5699163	0.00
Ca	43	2	He	44011	0.00
Sb	121	2	He	895929	0.00
Cu	63	1	No Gas	1914836	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	647735	1.80	709619	91.28	70	120	
Ge	72	2	He	441149	0.97	445920	98.93	70	120	
Ge	72	1	No Gas	1608708	1.68	1651482	97.41	70	120	

Calibration Standard Report

In	115	1	No Gas	1749411	2.48	1818500	96.20	70	120	
Bi	209	1	No Gas	1551431	1.60	1577939	98.32	70	120	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	024LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:48:08-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	2.035	2.035	3.88	70325	0.00	2	
Be	9	1	No Gas	1.901	1.901	1.93	6995	0.03	2	
V	51	2	He	1.888	1.888	1.61	12727	0.01	2	
Cr	52	2	He	2.116	2.116	4.11	21053	0.01	2	
Fe	56	2	He	205.335	205.335	1.60	1009232	0.02	200	
Se	78	2	He	2.082	2.082	8.59	330	0.63	2	
As	75	2	He	2.027	2.027	5.54	1797	0.11	2	
Ca	44	2	He	207.298	207.298	4.12	9120	2.27	200	
Na	23	2	He	207.202	207.202	0.98	284787	0.07	200	
Mg	24	2	He	216.145	216.145	1.32	128139	0.17	200	
K	39	2	He	205.025	205.025	1.44	301693	0.07	200	
Mn	55	2	He	1.960	1.960	3.38	10534	0.02	2	
Co	59	2	He	1.953	1.953	2.03	14398	0.01	2	
Ni	60	2	He	1.994	1.994	11.90	3697	0.05	2	
Cu	63	2	He	1.891	1.891	2.85	9357	0.02	2	
Zn	66	2	He	2.024	2.024	12.44	2447	0.08	2	
Al	27	2	He	1.846	1.846	16.51	1747	0.11	2	
B	11	1	No Gas	13.088	13.088	2.45	33390	0.04	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.745	1.745	6.19	53630	0.00	2	
Si	28	1	No Gas	10.604	10.604	7.46	538849	0.00	10	
Ag	107	1	No Gas	1.969	1.969	0.85	25495	0.01	2	
Cd	111	1	No Gas	1.928	1.928	4.69	4565	0.04	2	
Sr	88	1	No Gas	1.981	1.981	1.43	51352	0.00	2	
Mo	95	1	No Gas	1.976	1.976	3.41	10311	0.02	2	
Sn	118	1	No Gas	1.926	1.926	1.20	15366	0.01	2	
Sb	121	1	No Gas	1.971	1.971	3.26	21935	0.01	2	
Ba	137	1	No Gas	1.975	1.975	0.83	8029	0.02	2	
Tl	205	1	No Gas	2.281	2.281	1.91	44614	0.01	2	
Tl	203	1	No Gas	2.208	2.208	4.21	18204	0.01	2	
Pb	208	1	No Gas	1.994	1.994	2.33	58829	0.00	2	
U	238	1	No Gas	1.943	1.943	2.97	56869	0.00	2	
Ca	43	2	He	191.488	191.488	6.06	477	40.17	200	
Sb	121	2	He	1.922	1.922	3.03	9093	0.02	2	
Ti	47	2	He	2.175	2.175	11.27	477	0.46	200	
Cu	63	1	No Gas	1.942	1.942	1.73	21858	0.01	2	
Se	82	1	No Gas	1.968	1.968	28.47	494	0.40	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	707814	1.50	709619	99.75	70	120	
Ge	72	2	He	463613	0.79	445920	103.97	70	120	
Ge	72	1	No Gas	1686937	0.68	1651482	102.15	70	120	
In	115	1	No Gas	1818695	0.94	1818500	100.01	70	120	
Bi	209	1	No Gas	1597842	1.85	1577939	101.26	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	025LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:50:03-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.901	4.901	3.56	102869	0.00	5	
Be	9	1	No Gas	4.747	4.747	3.07	17152	0.03	5	
V	51	2	He	4.790	4.790	1.41	26827	0.02	5	
Cr	52	2	He	4.899	4.899	5.03	35797	0.01	5	
Fe	56	2	He	508.909	508.909	1.26	2457881	0.02	500	
Se	78	2	He	4.879	4.879	8.46	561	0.87	5	
As	75	2	He	4.899	4.899	1.32	4041	0.12	5	
Ca	44	2	He	501.411	501.411	2.86	20859	2.40	500	
Na	23	2	He	521.296	521.296	2.67	575965	0.09	500	
Mg	24	2	He	531.089	531.089	2.96	312115	0.17	500	
K	39	2	He	504.765	504.765	3.27	534649	0.09	500	
Mn	55	2	He	4.924	4.924	3.11	22993	0.02	5	
Co	59	2	He	4.997	4.997	1.15	36219	0.01	5	
Ni	60	2	He	4.968	4.968	1.73	8846	0.06	5	
Cu	63	2	He	4.889	4.889	0.50	22228	0.02	5	
Zn	66	2	He	4.881	4.881	7.35	5084	0.10	5	
Al	27	2	He	4.909	4.909	4.93	3084	0.16	5	
B	11	1	No Gas	26.079	26.079	3.98	58518	0.04	25	
Al	27	1	No Gas	4.468	4.468	2.56	90219	0.00	5	
Si	28	1	No Gas	24.472	24.472	6.07	640558	0.00	25	
Ag	107	1	No Gas	4.750	4.750	1.75	62541	0.01	5	
Cd	111	1	No Gas	4.707	4.707	1.70	11410	0.04	5	
Sr	88	1	No Gas	4.785	4.785	4.54	125431	0.00	5	
Mo	95	1	No Gas	4.730	4.730	4.91	25017	0.02	5	
Sn	118	1	No Gas	4.725	4.725	2.49	36885	0.01	5	
Sb	121	1	No Gas	4.619	4.619	2.18	51679	0.01	5	
Ba	137	1	No Gas	4.834	4.834	3.22	19709	0.02	5	
Tl	205	1	No Gas	5.441	5.441	1.04	104324	0.01	5	
Tl	203	1	No Gas	5.287	5.287	0.73	42603	0.01	5	
Pb	208	1	No Gas	4.865	4.865	0.31	142359	0.00	5	
U	238	1	No Gas	4.762	4.762	2.32	139598	0.00	5	
Ca	43	2	He	561.926	561.926	4.14	1323	42.46	500	
Sb	121	2	He	4.751	4.751	4.02	22236	0.02	5	
Ti	47	2	He	5.248	5.248	10.33	1113	0.47	5	
Cu	63	1	No Gas	4.773	4.773	1.84	50537	0.01	5	
Se	82	1	No Gas	4.339	4.339	25.28	925	0.47	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	698532	2.71	709619	98.44	70	120	
Ge	72	2	He	460911	1.03	445920	103.36	70	120	
Ge	72	1	No Gas	1702324	1.59	1651482	103.08	70	120	

Sample Report

In	115	1	No Gas	1861388	3.07	1818500	102.36	70	120	
Bi	209	1	No Gas	1600878	1.40	1577939	101.45	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	026_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:51:59-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.086	73.6	46540	0.6	0.5	
Be	9	1	No Gas	0.000	3538.7	55	24.1	0.5	
V	51	2	He	-0.044	-92.6	3212	5.8	2.5	
Cr	52	2	He	0.203	20.9	10684	2.4	2.5	
Fe	56	2	He	1.832	4.7	28012	1.1	100	
Se	78	2	He	-0.168	-101.6	140	10.3	1	
As	75	2	He	0.053	28.5	237	4.9	2.5	
Ca	44	2	He	9.168	28.5	1117	9.4	100	
Na	23	2	He	-1.948	-56.0	87868	0.8	100	
Mg	24	2	He	0.737	34.1	1003	15.0	100	
K	39	2	He	-3.028	-26.7	136637	0.4	100	
Mn	55	2	He	0.093	68.5	2577	10.5	2.5	
Co	59	2	He	-0.009	-51.5	203	15.8	2.5	
Ni	60	2	He	0.062	39.6	317	13.1	2.5	
Cu	63	2	He	-0.061	-58.1	883	17.0	1	
Zn	66	2	He	0.404	35.9	927	14.6	2.5	
Al	27	2	He	4.061	8.6	2704	5.4	5	
B	11	1	No Gas	2.064	9.3	11213	2.4	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	3.546	2.8	76322	0.5	5	
Si	28	1	No Gas	1.573	122.5	470264	0.7	10	
Ag	107	1	No Gas	-0.001	-1161.9	267	45.2	2.5	
Cd	111	1	No Gas	0.001	1117.5	6	496.9	1	
Sr	88	1	No Gas	0.014	23.9	1330	7.9	2.5	
Mo	95	1	No Gas	0.009	60.2	210	12.6	2.5	
Sn	118	1	No Gas	0.071	6.8	1663	3.9	5	
Sb	121	1	No Gas	0.027	31.8	427	20.2	2.5	
Ba	137	1	No Gas	0.040	17.8	423	4.9	2.5	
Tl	205	1	No Gas	0.018	97.6	1954	14.3	1	
Tl	203	1	No Gas	-0.012	-47.3	663	4.6	1	
Pb	208	1	No Gas	0.018	3.2	1553	2.9	2.5	
U	238	1	No Gas	0.002	51.5	130	27.7	2.5	
Ca	43	2	He	-7.763	-64.8	17	69.3	100	
Sb	121	2	He	0.024	26.8	187	16.4	2.5	
Ti	47	2	He	-0.002	-4328.6	20	86.6	2.5	
Se	82	1	No Gas	-0.917	-83.5	-16	-849.6	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697216	1.04	709619	98.25	70	120	
Ge	72	2	He	459741	0.37	445920	103.10	70	120	
Ge	72	1	No Gas	1666051	2.06	1651482	100.88	70	120	
In	115	1	No Gas	1830694	1.79	1818500	100.67	70	120	
Bi	209	1	No Gas	1563096	2.32	1577939	99.06	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	027_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:53:56-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	98.939	4.976	1155709	2.23	100	98.9	90	110	
Be	9	1	No Gas	98.765	2.231	342416	0.45	100	98.8	90	110	
V	51	2	He	104.420	0.847	506660	0.54	100	104.4	90	110	
Cr	52	2	He	103.365	0.501	554639	0.43	100	103.4	90	110	
Fe	56	2	He	10242.189	1.258	48455689	1.62	10000	102.4	90	110	
Se	78	2	He	101.591	2.935	8519	2.40	100	101.6	90	110	
As	75	2	He	100.948	0.534	78380	0.82	100	100.9	90	110	
Ca	44	2	He	10110.721	1.122	400905	1.00	10000	101.1	90	110	
Na	23	2	He	10291.536	1.597	9559538	1.88	10000	102.9	90	110	
Mg	24	2	He	10256.839	0.633	5939280	1.15	10000	102.6	90	110	
K	39	2	He	10331.162	1.867	8122497	1.44	10000	103.3	90	110	
Mn	55	2	He	103.497	0.736	433681	1.01	100	103.5	90	110	
Co	59	2	He	101.798	0.627	722978	0.40	100	101.8	90	110	
Ni	60	2	He	103.986	0.106	178574	0.54	100	104.0	90	110	
Cu	63	2	He	102.750	0.438	438362	0.32	100	102.7	90	110	
Zn	66	2	He	103.550	0.418	95360	0.91	100	103.6	90	110	
Al	27	2	He	102.663	1.860	45498	1.32	100	102.7	90	110	
B	11	1	No Gas	496.163	4.225	947084	1.71	500	99.2	90	110	
Al	27	1	No Gas	102.216	3.326	1338363	1.96	100	102.2	90	110	
Si	28	1	No Gas	502.561	4.856	3841012	1.64	500	100.5	90	110	
Ag	107	1	No Gas	99.891	1.196	1252704	1.63	100	99.9	90	110	
Cd	111	1	No Gas	101.842	0.702	235944	1.71	100	101.8	90	110	
Sr	88	1	No Gas	101.617	3.017	2530109	1.14	100	101.6	90	110	
Mo	95	1	No Gas	99.568	2.369	500845	1.18	100	99.6	90	110	
Sn	118	1	No Gas	100.176	1.190	725844	1.55	100	100.2	90	110	
Sb	121	1	No Gas	102.834	4.233	1107788	1.90	100	102.8	90	110	
Ba	137	1	No Gas	101.687	1.433	391534	0.76	100	101.7	90	110	
Tl	205	1	No Gas	102.484	0.791	1872681	1.04	100	102.5	90	110	
Tl	203	1	No Gas	99.711	1.220	764091	0.80	100	99.7	90	110	
Pb	208	1	No Gas	101.172	1.518	2844193	0.21	100	101.2	90	110	
U	238	1	No Gas	101.791	1.682	2886906	0.24	100	101.8	90	110	
Ca	43	2	He	10626.387	1.938	24088	1.65	10000	106.3	90	110	
Sb	121	2	He	101.106	0.954	465487	0.62	100	101.1	90	110	
Ti	47	2	He	100.463	1.011	20676	1.52	100	100.5	90	110	
Cu	63	1	No Gas	101.318	3.036	986472	1.50	100	101.3	90	110	
Se	82	1	No Gas	99.473	3.297	17326	0.66	100	99.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672262	2.57	709619	94.74	70	120	
Ge	72	2	He	454836	0.52	445920	102.00	70	120	
Ge	72	1	No Gas	1643832	2.71	1651482	99.54	70	120	
In	115	1	No Gas	1780231	2.18	1818500	97.90	70	120	
Bi	209	1	No Gas	1549310	1.44	1577939	98.19	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	029ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T12:59:47-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.250	31.2	48630	1.2	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.010	-34.9	18	68.6	0	ICSA Main CR1 Failed
V	51	2	He	0.157	14.3	3967	2.8	0	ICSA Main CR1 Failed
Cr	52	2	He	1.790	4.3	18126	1.9	0	ICSA Main CR1 Failed
Fe	56	2	He	100158.452	0.6	453357273	0.4	0	
Se	78	2	He	-0.090	-483.3	139	24.6	0	ICSA Main CR1 Failed
As	75	2	He	0.274	17.3	388	9.1	0	ICSA Main CR1 Failed
Ca	44	2	He	94155.720	0.9	3567544	1.1	0	
Na	23	2	He	99784.884	1.1	87971472	0.9	0	
Mg	24	2	He	98960.909	1.1	54840354	0.9	0	
K	39	2	He	99609.652	2.0	73821497	1.8	0	
Mn	55	2	He	0.879	3.6	5578	2.1	0	ICSA Main CR1 Failed
Co	59	2	He	0.420	2.5	3104	2.5	0	ICSA Main CR1 Failed
Ni	60	2	He	0.973	1.7	1797	1.7	0	ICSA Main CR1 Failed
Cu	63	2	He	0.306	13.3	2330	6.9	0	ICSA Main CR1 Failed
Zn	66	2	He	2.978	4.0	3134	3.5	0	ICSA Main CR1 Failed
Al	27	2	He	93533.846	1.6	38883069	1.4	0	
B	11	1	No Gas	3.756	5.6	14598	3.2	0	
Al	27	1	No Gas	96485.263	1.3	1180128142	1.3	0	
Si	28	1	No Gas	26.196	1.6	601931	0.6	0	
Ag	107	1	No Gas	0.175	8.6	2310	7.2	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	0.334	49.5	729	49.5	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.647	3.0	109361	2.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2006.031	1.4	9460754	0.7	0	
Sn	118	1	No Gas	0.063	41.2	1463	11.3	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.273	2.5	2937	1.9	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.704	9.9	2780	8.4	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.070	19.8	2584	9.9	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.071	23.1	1160	10.8	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.217	12.4	6374	9.1	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.011	17.2	340	16.4	0	ICSA Main CR1 Failed
Ca	43	2	He	101066.687	0.4	219009	0.5	0	
Sb	121	2	He	0.246	12.2	1157	11.3	0	ICSA Main CR1 Failed
Ti	47	2	He	2106.105	0.7	414459	0.5	0	
Se	82	1	No Gas	-0.251	-245.7	94	108.5	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	699816	0.79	709619	98.62	70	120	
Ge	72	2	He	435335	0.22	445920	97.63	70	120	
Ge	72	1	No Gas	1569898	0.52	1651482	95.06	70	120	
In	115	1	No Gas	1669215	0.81	1818500	91.79	70	120	
Bi	209	1	No Gas	1386557	1.95	1577939	87.87	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	030ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:01:46-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	94.544	5.367	1044548	3.51	100	94.5	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	94.735	3.060	310019	0.27	100	94.7	80	120	
V	51	2	He	101.388	1.929	464613	0.89	100	101.4	80	120	
Cr	52	2	He	101.536	1.685	514616	0.91	100	101.5	80	120	
Fe	56	2	He	111288.044	1.736	496950006	0.59	100	111288.0	80	120	
Se	78	2	He	103.281	3.517	8175	2.17	100	103.3	80	120	
As	75	2	He	106.067	1.345	77756	0.46	100	106.1	80	120	
Ca	44	2	He	104841.108	2.405	3918922	2.05	100	104841.1	80	120	
Na	23	2	He	110302.144	2.543	95922832	1.63	100	110302.1	80	120	
Mg	24	2	He	110237.633	1.489	60268536	0.41	100	110237.6	80	120	
K	39	2	He	110362.082	1.557	80677149	0.31	100	110362.1	80	120	
Mn	55	2	He	102.285	2.516	404698	1.38	100	102.3	80	120	
Co	59	2	He	98.363	1.894	659630	0.60	100	98.4	80	120	
Ni	60	2	He	98.673	2.609	160002	1.64	100	98.7	80	120	
Cu	63	2	He	99.725	1.440	401787	0.89	100	99.7	80	120	
Zn	66	2	He	99.803	0.945	86807	0.47	100	99.8	80	120	
Al	27	2	He	94698.952	2.368	38835519	1.07	100	94699.0	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	480.115	1.191	865962	2.62	100	480.1	80	120	
Al	27	1	No Gas	93989.740	4.434	1175979796	1.05	100	93989.7	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	502.209	4.663	3753210	0.63	100	502.2	80	120	
Ag	107	1	No Gas	96.539	2.374	1125147	2.63	100	96.5	80	120	
Cd	111	1	No Gas	100.532	1.721	216417	0.41	100	100.5	80	120	
Sr	88	1	No Gas	110.174	3.140	2549389	1.84	100	110.2	80	120	
Mo	95	1	No Gas	2121.994	2.045	9917214	0.89	100	2122.0	80	120	
Sn	118	1	No Gas	101.257	1.409	681764	0.41	100	101.3	80	120	
Sb	121	1	No Gas	96.362	3.611	1015123	1.37	100	96.4	80	120	
Ba	137	1	No Gas	101.311	1.805	362508	0.57	100	101.3	80	120	
Tl	205	1	No Gas	104.207	3.475	1739386	3.76	100	104.2	80	120	
Tl	203	1	No Gas	99.945	2.999	699554	2.71	100	99.9	80	120	
Pb	208	1	No Gas	99.120	1.277	2545335	0.43	100	99.1	80	120	
U	238	1	No Gas	105.802	2.423	2740954	2.06	100	105.8	80	120	
Ca	43	2	He	110728.170	1.910	236705	0.70	100	110728.2	80	120	
Sb	121	2	He	98.802	2.176	429508	0.90	100	98.8	80	120	
Ti	47	2	He	2212.589	1.674	429556	0.61	100	2212.6	80	120	
Cu	63	1	No Gas	95.049	3.503	904866	0.64	100	95.0	80	120	
Se	82	1	No Gas	100.414	5.551	17092	2.76	100	100.4	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	634672	2.84	709619	89.44	70	120	
Ge	72	2	He	429534	1.32	445920	96.33	70	120	
Ge	72	1	No Gas	1607595	3.61	1651482	97.34	70	120	
In	115	1	No Gas	1654294	1.33	1818500	90.97	70	120	
Bi	209	1	No Gas	1415162	1.41	1577939	89.68	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	033_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:09:03-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
n	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.803	2.897	1078503	2.75	100	98.8	90	110	
Be	9	1	No Gas	95.770	1.906	310095	0.62	100	95.8	90	110	
V	51	2	He	100.746	0.756	494004	0.87	100	100.7	90	110	
Cr	52	2	He	100.041	0.829	542655	1.09	100	100.0	90	110	
Fe	56	2	He	10066.624	1.748	48113148	1.37	10000	100.7	90	110	
Se	78	2	He	100.109	2.708	8483	2.22	100	100.1	90	110	
As	75	2	He	98.880	1.558	77568	1.29	100	98.9	90	110	
Ca	44	2	He	9827.640	0.713	393724	0.74	10000	98.3	90	110	
Na	23	2	He	9944.950	1.277	9335528	1.18	10000	99.4	90	110	
Mg	24	2	He	9972.691	0.843	5834149	0.85	10000	99.7	90	110	
K	39	2	He	10046.480	1.191	7984306	1.13	10000	100.5	90	110	
Mn	55	2	He	99.798	1.215	422552	0.68	100	99.8	90	110	
Co	59	2	He	98.790	0.487	708870	0.51	100	98.8	90	110	
Ni	60	2	He	100.907	0.517	175083	1.06	100	100.9	90	110	
Cu	63	2	He	100.637	1.269	433796	1.06	100	100.6	90	110	
Zn	66	2	He	100.453	1.101	93474	0.65	100	100.5	90	110	
Al	27	2	He	97.424	1.874	43669	1.32	100	97.4	90	110	
B	11	1	No Gas	495.566	0.808	883913	1.72	500	99.1	90	110	
Al	27	1	No Gas	95.347	2.888	1262016	2.79	100	95.3	90	110	
Si	28	1	No Gas	468.031	1.800	3642621	0.89	5000	9.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.066	2.025	1260936	1.49	100	99.1	90	110	
Cd	111	1	No Gas	99.324	1.605	233543	0.94	100	99.3	90	110	
Sr	88	1	No Gas	102.388	1.691	2588194	1.11	100	102.4	90	110	
Mo	95	1	No Gas	97.053	0.915	495608	0.35	100	97.1	90	110	
Sn	118	1	No Gas	99.757	0.772	733662	0.57	100	99.8	90	110	
Sb	121	1	No Gas	98.446	2.084	1070555	1.39	100	98.4	90	110	
Ba	137	1	No Gas	99.160	1.098	387572	0.86	100	99.2	90	110	
Tl	205	1	No Gas	105.202	1.874	1930416	1.12	100	105.2	90	110	
Tl	203	1	No Gas	99.678	1.440	767112	0.63	100	99.7	90	110	
Pb	208	1	No Gas	99.894	1.455	2820595	1.52	100	99.9	90	110	
U	238	1	No Gas	103.679	1.240	2953315	0.95	100	103.7	90	110	
Ca	43	2	He	10265.461	2.041	23510	1.51	10000	102.7	90	110	
Sb	121	2	He	97.717	0.819	454529	0.54	100	97.7	90	110	
Ti	47	2	He	100.502	1.157	20896	1.07	100	100.5	90	110	
Cu	63	1	No Gas	97.529	0.450	958519	1.08	100	97.5	90	110	
Se	82	1	No Gas	101.774	0.493	17890	0.42	100	101.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627795	2.37	709619	88.47	70	120	
Ge	72	2	He	459528	0.54	445920	103.05	70	120	
Ge	72	1	No Gas	1658341	0.82	1651482	100.42	70	120	
In	115	1	No Gas	1806789	0.80	1818500	99.36	70	120	
Bi	209	1	No Gas	1555910	0.85	1577939	98.60	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	034_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:10:55-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.023	-264.1	44982	1.3	0.5	
Be	9	1	No Gas	-0.001	-481.4	52	24.4	0.5	
V	51	2	He	0.018	26.3	3444	1.1	2.5	
Cr	52	2	He	0.198	9.4	10441	0.4	2.5	
Fe	56	2	He	1.576	18.7	26253	5.3	100	
Se	78	2	He	-0.035	-520.8	148	10.2	2	
As	75	2	He	0.038	95.3	220	12.9	2.5	
Ca	44	2	He	4.984	34.1	930	6.7	100	
Na	23	2	He	-16.130	-2.7	73181	1.0	100	
Mg	24	2	He	1.203	12.5	1250	7.3	100	
K	39	2	He	-2.330	-104.2	134426	1.3	100	
Mn	55	2	He	-0.065	-15.8	1873	2.2	2.5	
Co	59	2	He	-0.002	-368.7	243	24.8	2.5	
Ni	60	2	He	0.006	357.8	217	18.7	2.5	
Cu	63	2	He	-0.064	-12.6	850	4.2	2	
Zn	66	2	He	0.164	15.2	690	2.9	2.5	
Al	27	2	He	0.598	52.0	1160	12.0	5	
B	11	1	No Gas	5.545	10.9	17933	5.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	0.199	100.1	33179	6.1	5	
Si	28	1	No Gas	-5.323	-28.1	427125	0.4	10	
Ag	107	1	No Gas	0.013	21.5	447	9.0	2.5	
Cd	111	1	No Gas	0.004	58.7	13	45.8	1	
Sr	88	1	No Gas	-0.003	-8.8	880	0.0	2.5	
Mo	95	1	No Gas	0.136	13.5	867	11.3	2.5	
Sn	118	1	No Gas	0.085	28.2	1767	9.4	5	
Sb	121	1	No Gas	0.080	18.1	1010	14.7	2.5	
Ba	137	1	No Gas	-0.013	-55.6	213	14.3	2.5	
Tl	205	1	No Gas	1.105	36.8	22105	33.2	1	CCB Main CR1 Failed
Tl	203	1	No Gas	1.083	37.0	9177	33.1	1	CCB Main CR1 Failed
Pb	208	1	No Gas	0.025	33.3	1750	13.3	2.5	
U	238	1	No Gas	0.022	17.2	700	14.9	2.5	
Ca	43	2	He	2.798	3.1	40	0.0	100	
Sb	121	2	He	0.058	26.6	340	20.6	2.5	
Ti	47	2	He	-0.033	-173.8	13	86.6	2.5	
Cu	63	1	No Gas	-0.050	-30.5	1984	5.1	2.5	
Se	82	1	No Gas	-0.812	-10.7	1	1204.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	692881	2.79	709619	97.64	70	120	
Ge	72	2	He	450508	0.49	445920	101.03	70	120	
Ge	72	1	No Gas	1681895	2.82	1651482	101.84	70	120	
In	115	1	No Gas	1832100	0.87	1818500	100.75	70	120	
Bi	209	1	No Gas	1575040	0.96	1577939	99.82	70	120	

Sample Report

Sample Table

Sample Name	MBLK-198597
Data File Name	035SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:13:48-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.057	-0.057	-72.94	45774	0.00	2000	
Be	9	1	No Gas	-0.004	-0.004	-50.63	42	-0.01	2000	
V	51	2	He	0.178	0.178	12.30	4308	0.00	2000	
Cr	52	2	He	0.634	0.634	2.29	13036	0.00	2000	
Fe	56	2	He	2.209	2.209	11.79	29944	0.01	200000	
Se	78	2	He	-0.103	-0.103	-170.02	146	-0.07	2000	
As	75	2	He	0.059	0.059	84.65	242	0.02	2000	
Ca	44	2	He	22.231	22.231	5.76	1647	1.35	200000	
Na	23	2	He	-7.916	-7.916	-4.79	82690	-0.01	200000	
Mg	24	2	He	12.744	12.744	2.75	8066	0.16	200000	
K	39	2	He	-3.620	-3.620	-52.96	136799	0.00	200000	
Mn	55	2	He	-0.013	-0.013	-80.01	2140	0.00	2000	
Co	59	2	He	-0.024	-0.024	-9.75	90	-0.03	2000	
Ni	60	2	He	0.036	0.036	8.95	273	0.01	2000	
Cu	63	2	He	0.079	0.079	41.75	1490	0.01	2000	
Zn	66	2	He	1.244	1.244	27.93	1710	0.07	2000	
Al	27	2	He	5.894	5.894	6.62	3524	0.17	2000	
B	11	1	No Gas	2.621	2.621	7.11	12556	0.02	2000	
Al	27	1	No Gas	6.895	6.895	42.19	121517	0.01	2000	
Si	28	1	No Gas	87.456	87.456	4.17	1076459	0.01	2000	
Ag	107	1	No Gas	0.037	0.037	14.17	760	0.00	2000	
Cd	111	1	No Gas	0.001	0.001	184.00	6	0.02	2000	
Sr	88	1	No Gas	0.037	0.037	11.53	1950	0.00	2000	
Mo	95	1	No Gas	0.114	0.114	64.88	760	0.01	2000	
Sn	118	1	No Gas	0.002	0.002	379.47	1167	0.00	2000	
Sb	121	1	No Gas	0.027	0.027	32.50	437	0.01	2000	
Ba	137	1	No Gas	0.062	0.062	26.31	517	0.01	2000	
Tl	205	1	No Gas	0.035	0.035	46.60	2464	0.00	2000	
Tl	203	1	No Gas	0.022	0.022	136.63	1010	0.00	2000	
Pb	208	1	No Gas	0.037	0.037	14.24	2263	0.00	2000	
U	238	1	No Gas	0.003	0.003	13.24	153	0.00	2000	
Ca	43	2	He	15.420	15.420	28.53	70	22.03	200000	
Sb	121	2	He	0.023	0.023	14.25	183	0.01	2000	
Ti	47	2	He	0.078	0.078	189.88	37	0.21	2000	
Cu	63	1	No Gas	0.102	0.102	5.32	3531	0.00	2000	
Zn	66	1	No Gas	1.325	1.325	1.70	5164	0.03	2000	
Se	82	1	No Gas	-0.034	-0.034	-1976.81	138	-0.02	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711410	2.77	709619	100.25	70	120	
Ge	72	2	He	461821	0.75	445920	103.57	70	120	

Sample Report

Ge	72	1	No Gas	1696033	1.89	1651482	102.70	70	120	
In	115	1	No Gas	1856925	1.63	1818500	102.11	70	120	
Bi	209	1	No Gas	1695954	2.51	1577939	107.48	70	120	

Sample Report

Sample Table

Sample Name	LCS-198597
Data File Name	036SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:15:46-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	92.089	92.089	4.30	1034325	0.01	2000	
Be	9	1	No Gas	50.679	50.679	1.66	168478	0.03	2000	
V	51	2	He	52.165	52.165	0.91	258290	0.02	2000	
Cr	52	2	He	51.850	51.850	1.79	286801	0.02	2000	
Fe	56	2	He	5288.161	5288.161	0.95	25369666	0.02	200000	
Se	78	2	He	51.305	51.305	2.52	4437	1.16	2000	
As	75	2	He	52.588	52.588	2.74	41479	0.13	2000	
Ca	44	2	He	5205.632	5205.632	1.15	209595	2.48	200000	
Na	23	2	He	5183.055	5183.055	0.96	4924841	0.11	200000	
Mg	24	2	He	5257.658	5257.658	2.26	3086023	0.17	200000	
K	39	2	He	5142.472	5142.472	1.07	4168472	0.12	200000	
Mn	55	2	He	52.796	52.796	2.31	225308	0.02	2000	
Co	59	2	He	51.843	51.843	2.33	373332	0.01	2000	
Ni	60	2	He	52.644	52.644	1.47	91741	0.06	2000	
Cu	63	2	He	53.875	53.875	2.89	233508	0.02	2000	
Zn	66	2	He	55.275	55.275	3.37	51849	0.11	2000	
Al	27	2	He	96.224	96.224	2.94	43284	0.22	2000	
B	11	1	No Gas	452.474	452.474	3.98	828577	0.05	2000	
Al	27	1	No Gas	96.322	96.322	2.36	1293711	0.01	2000	
Si	28	1	No Gas	508.199	508.199	2.48	3974850	0.01	2000	
Ag	107	1	No Gas	52.043	52.043	1.66	654308	0.01	2000	
Cd	111	1	No Gas	54.352	54.352	0.64	126213	0.04	2000	
Sr	88	1	No Gas	95.285	95.285	1.03	2378771	0.00	2000	
Mo	95	1	No Gas	51.745	51.745	0.98	261017	0.02	2000	
Sn	118	1	No Gas	93.847	93.847	1.97	681642	0.01	2000	
Sb	121	1	No Gas	51.190	51.190	0.86	565146	0.01	2000	
Ba	137	1	No Gas	53.361	53.361	1.65	206076	0.03	2000	
Tl	205	1	No Gas	47.442	47.442	0.34	884385	0.01	2000	
Tl	203	1	No Gas	47.035	47.035	1.47	367743	0.01	2000	
Pb	208	1	No Gas	52.459	52.459	0.23	1503582	0.00	2000	
U	238	1	No Gas	92.039	92.039	2.09	2660415	0.00	2000	
Ca	43	2	He	5716.837	5716.837	1.81	13153	43.46	200000	
Sb	121	2	He	51.310	51.310	1.27	239492	0.02	2000	
Ti	47	2	He	129.374	129.374	3.30	26980	0.48	2000	
Cu	63	1	No Gas	52.466	52.466	1.23	524535	0.01	2000	
Zn	66	1	No Gas	54.269	54.269	0.57	149733	0.04	2000	
Se	82	1	No Gas	50.852	50.852	2.15	9144	0.56	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	644479	2.70	709619	90.82	70	120	
Ge	72	2	He	461067	0.80	445920	103.40	70	120	
Ge	72	1	No Gas	1683386	1.63	1651482	101.93	70	120	
In	115	1	No Gas	1784271	0.74	1818500	98.12	70	120	

Sample Report

Bi	209	1	No Gas	1578874	0.58	1577939	100.06	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02SD
Data File Name	038SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:19:36-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.460	4.460	4.96	96137	0.00	2000	
Be	9	1	No Gas	0.010	0.010	8.94	90	0.01	2000	
V	51	2	He	0.561	0.561	1.74	6135	0.01	2000	
Cr	52	2	He	0.397	0.397	10.96	11672	0.00	2000	
Fe	56	2	He	2018.996	2018.996	1.05	9633314	0.02	200000	
Se	78	2	He	-0.146	-0.146	-235.10	141	-0.10	2000	
As	75	2	He	5.186	5.186	2.28	4238	0.12	2000	
Ca	44	2	He	17468.233	17468.233	0.90	696913	2.51	200000	
Na	23	2	He	62460.384	62460.384	2.72	57963566	0.11	200000	
Mg	24	2	He	14382.766	14382.766	0.69	8385121	0.17	200000	
K	39	2	He	379.912	379.912	1.13	434136	0.09	200000	
Mn	55	2	He	139.633	139.633	1.42	588407	0.02	2000	
Co	59	2	He	0.043	0.043	10.02	570	0.01	2000	
Ni	60	2	He	0.367	0.367	11.92	843	0.04	2000	
Cu	63	2	He	0.006	0.006	471.98	1167	0.00	2000	
Zn	66	2	He	0.809	0.809	15.70	1297	0.06	2000	
Al	27	2	He	4.753	4.753	11.63	2997	0.16	2000	
B	11	1	No Gas	102.871	102.871	2.55	206383	0.05	2000	
Al	27	1	No Gas	4.224	4.224	1.35	85083	0.00	2000	
Si	28	1	No Gas	2329.455	2329.455	2.24	16372805	0.01	2000	>LDR
Ag	107	1	No Gas	0.018	0.018	17.78	493	0.00	2000	
Cd	111	1	No Gas	-0.015	-0.015	-127.97	-30	0.05	2000	
Sr	88	1	No Gas	135.942	135.942	1.89	3366771	0.00	2000	
Mo	95	1	No Gas	0.170	0.170	12.03	1007	0.02	2000	
Sn	118	1	No Gas	0.790	0.790	7.00	6789	0.01	2000	
Sb	121	1	No Gas	0.114	0.114	7.10	1380	0.01	2000	
Ba	137	1	No Gas	44.344	44.344	2.27	169951	0.03	2000	
Tl	205	1	No Gas	0.095	0.095	19.39	3294	0.00	2000	
Tl	203	1	No Gas	0.067	0.067	45.87	1247	0.01	2000	
Pb	208	1	No Gas	0.179	0.179	1.27	5941	0.00	2000	
U	238	1	No Gas	0.032	0.032	8.03	953	0.00	2000	
Ca	43	2	He	18064.956	18064.956	1.10	41212	43.83	200000	
Sb	121	2	He	0.106	0.106	12.34	567	0.02	2000	
Ti	47	2	He	0.304	0.304	39.15	83	0.36	2000	
Cu	63	1	No Gas	0.338	0.338	8.77	5791	0.01	2000	
Zn	66	1	No Gas	0.781	0.781	8.28	3601	0.02	2000	
Se	82	1	No Gas	-0.263	-0.263	-161.75	98	-0.27	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	687147	1.97	709619	96.83	70	120	
Ge	72	2	He	457971	0.73	445920	102.70	70	120	
Ge	72	1	No Gas	1664932	1.46	1651482	100.81	70	120	
In	115	1	No Gas	1770588	1.80	1818500	97.37	70	120	

Sample Report

Bi	209	1	No Gas	1522855	0.71	1577939	96.51	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MS
Data File Name	039SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:21:35-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	107.763	107.763	5.81	1280236	0.01	2000	
Be	9	1	No Gas	44.767	44.767	4.35	158340	0.03	2000	
V	51	2	He	50.640	50.640	0.47	246261	0.02	2000	
Cr	52	2	He	48.295	48.295	1.42	262912	0.02	2000	
Fe	56	2	He	14595.958	14595.958	1.50	68707422	0.02	200000	
Se	78	2	He	47.589	47.589	0.27	4052	1.17	2000	
As	75	2	He	73.789	73.789	1.53	57064	0.13	2000	
Ca	44	2	He	88000.684	88000.684	0.40	3466776	2.54	200000	
Na	23	2	He	306871.544	306871.544	0.79	281108222	0.11	200000	>LDR
Mg	24	2	He	74509.211	74509.211	0.45	42929928	0.17	200000	
K	39	2	He	6707.421	6707.421	1.14	5295945	0.13	200000	
Mn	55	2	He	711.575	711.575	0.52	2954505	0.02	2000	
Co	59	2	He	46.407	46.407	0.39	328129	0.01	2000	
Ni	60	2	He	48.565	48.565	1.02	83103	0.06	2000	
Cu	63	2	He	47.240	47.240	0.99	201169	0.02	2000	
Zn	66	2	He	49.567	49.567	2.85	45707	0.11	2000	
Al	27	2	He	103.920	103.920	0.67	45823	0.23	2000	
B	11	1	No Gas	914.842	914.842	3.11	1776295	0.05	2000	
Al	27	1	No Gas	106.707	106.707	3.77	1401162	0.01	2000	
Si	28	1	No Gas	12134.961	12134.961	3.30	82596677	0.01	2000	>LDR
Ag	107	1	No Gas	45.454	45.454	4.13	549536	0.01	2000	
Cd	111	1	No Gas	48.923	48.923	2.20	109263	0.04	2000	
Sr	88	1	No Gas	770.679	770.679	2.62	18496783	0.00	2000	
Mo	95	1	No Gas	48.463	48.463	2.14	235142	0.02	2000	
Sn	118	1	No Gas	96.129	96.129	2.21	671510	0.01	2000	
Sb	121	1	No Gas	45.934	45.934	2.29	496978	0.01	2000	
Ba	137	1	No Gas	269.408	269.408	3.20	999588	0.03	2000	
Tl	205	1	No Gas	51.743	51.743	3.02	891298	0.01	2000	
Tl	203	1	No Gas	50.839	50.839	2.46	367315	0.01	2000	
Pb	208	1	No Gas	48.016	48.016	1.81	1272095	0.00	2000	
U	238	1	No Gas	100.012	100.012	2.36	2671963	0.00	2000	
Ca	43	2	He	94815.514	94815.514	1.34	213617	44.39	200000	
Sb	121	2	He	46.164	46.164	1.37	211542	0.02	2000	
Ti	47	2	He	150.859	150.859	0.24	30885	0.49	2000	
Cu	63	1	No Gas	48.675	48.675	2.89	477010	0.01	2000	
Zn	66	1	No Gas	49.641	49.641	3.47	134327	0.04	2000	
Se	82	1	No Gas	49.278	49.278	4.65	8690	0.57	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	686073	3.20	709619	96.68	70	120	
Ge	72	2	He	452622	0.42	445920	101.50	70	120	
Ge	72	1	No Gas	1649871	1.50	1651482	99.90	70	120	
In	115	1	No Gas	1716591	2.43	1818500	94.40	70	120	
Bi	209	1	No Gas	1459516	1.33	1577939	92.50	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02MSD
Data File Name	040SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:23:30-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	110.296	110.296	3.75	1363881	0.01	2000	
Be	9	1	No Gas	45.773	45.773	2.36	168644	0.03	2000	
V	51	2	He	54.570	54.570	1.63	264720	0.02	2000	
Cr	52	2	He	51.678	51.678	1.21	280263	0.02	2000	
Fe	56	2	He	15293.029	15293.029	0.73	71891154	0.02	200000	
Se	78	2	He	51.116	51.116	0.84	4335	1.18	2000	
As	75	2	He	78.850	78.850	1.15	60884	0.13	2000	
Ca	44	2	He	92537.305	92537.305	1.83	3639926	2.54	200000	
Na	23	2	He	330902.159	330902.159	0.69	302684675	0.11	200000	>LDR
Mg	24	2	He	81263.198	81263.198	2.52	46748416	0.17	200000	
K	39	2	He	7109.842	7109.842	0.66	5597645	0.13	200000	
Mn	55	2	He	750.271	750.271	0.86	3110982	0.02	2000	
Co	59	2	He	48.638	48.638	0.70	343406	0.01	2000	
Ni	60	2	He	52.419	52.419	0.35	89557	0.06	2000	
Cu	63	2	He	49.888	49.888	1.34	212088	0.02	2000	
Zn	66	2	He	50.946	50.946	2.59	46898	0.11	2000	
Al	27	2	He	110.833	110.833	1.58	48739	0.23	2000	
B	11	1	No Gas	926.688	926.688	3.26	1873488	0.05	2000	
Al	27	1	No Gas	109.385	109.385	0.58	1447203	0.01	2000	
Si	28	1	No Gas	12642.917	12642.917	1.07	86728209	0.01	2000	>LDR
Ag	107	1	No Gas	47.472	47.472	0.05	575451	0.01	2000	
Cd	111	1	No Gas	50.821	50.821	0.92	113780	0.04	2000	
Sr	88	1	No Gas	806.296	806.296	1.49	19399548	0.00	2000	
Mo	95	1	No Gas	51.143	51.143	1.36	248725	0.02	2000	
Sn	118	1	No Gas	104.000	104.000	0.47	728173	0.01	2000	
Sb	121	1	No Gas	48.294	48.294	1.77	526645	0.01	2000	
Ba	137	1	No Gas	284.288	284.288	0.76	1057462	0.03	2000	
Tl	205	1	No Gas	56.390	56.390	2.02	948125	0.01	2000	
Tl	203	1	No Gas	55.827	55.827	1.62	393707	0.01	2000	
Pb	208	1	No Gas	51.399	51.399	1.29	1329363	0.00	2000	
U	238	1	No Gas	106.481	106.481	0.92	2777544	0.00	2000	
Ca	43	2	He	99466.331	99466.331	1.84	223764	44.45	200000	
Sb	121	2	He	49.053	49.053	1.77	224452	0.02	2000	
Ti	47	2	He	160.978	160.978	0.80	32910	0.49	2000	
Cu	63	1	No Gas	50.702	50.702	0.88	500784	0.01	2000	
Zn	66	1	No Gas	51.608	51.608	1.34	140709	0.04	2000	
Se	82	1	No Gas	51.240	51.240	3.55	9101	0.56	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	714292	2.49	709619	100.66	70	120	
Ge	72	2	He	452003	1.23	445920	101.36	70	120	
Ge	72	1	No Gas	1662696	0.59	1651482	100.68	70	120	
In	115	1	No Gas	1720171	0.50	1818500	94.59	70	120	
Bi	209	1	No Gas	1424923	2.24	1577939	90.30	70	120	

Sample Report

Sample Table

Sample Name	HS23071878-02PDS
Data File Name	041SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:25:25-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD B 197597
ISTD Ref FileName	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	18.480	18.480	2.16	275374	0.01	2000	
Be	9	1	No Gas	90.721	90.721	3.04	344111	0.03	2000	
V	51	2	He	106.807	106.807	0.55	517004	0.02	2000	
Cr	52	2	He	102.427	102.427	0.40	548446	0.02	2000	
Fe	56	2	He	20109.411	20109.411	0.54	94901302	0.02	200000	
Se	78	2	He	102.125	102.125	0.74	8544	1.20	2000	
As	75	2	He	129.719	129.719	0.84	100436	0.13	2000	
Ca	44	2	He	92983.959	92983.959	1.51	3672673	2.53	200000	
Na	23	2	He	312349.936	312349.936	1.41	286876076	0.11	200000	>LDR
Mg	24	2	He	80956.486	80956.486	1.46	46765744	0.17	200000	
K	39	2	He	12422.152	12422.152	0.61	9716929	0.13	200000	
Mn	55	2	He	761.953	761.953	0.56	3171772	0.02	2000	
Co	59	2	He	100.600	100.600	0.30	712862	0.01	2000	
Ni	60	2	He	103.002	103.002	0.52	176483	0.06	2000	
Cu	63	2	He	101.790	101.790	1.28	433298	0.02	2000	
Zn	66	2	He	105.612	105.612	1.05	97026	0.11	2000	
Al	27	2	He	112.832	112.832	1.80	49803	0.23	2000	
B	11	1	No Gas	447.889	447.889	2.94	936398	0.05	2000	
Al	27	1	No Gas	112.290	112.290	2.02	1489494	0.01	2000	
Si	28	1	No Gas	11523.296	11523.296	1.59	79341934	0.01	2000	>LDR
Ag	107	1	No Gas	78.565	78.565	1.16	979505	0.01	2000	
Cd	111	1	No Gas	100.328	100.328	0.10	231063	0.04	2000	
Sr	88	1	No Gas	639.954	639.954	2.47	15838931	0.00	2000	
Mo	95	1	No Gas	99.551	99.551	2.38	497880	0.02	2000	
Sn	118	1	No Gas	0.219	0.219	23.30	2670	0.01	2000	
Sb	121	1	No Gas	96.562	96.562	2.93	1056101	0.01	2000	
Ba	137	1	No Gas	310.800	310.800	3.60	1189144	0.03	2000	
Tl	205	1	No Gas	115.072	115.072	0.38	1971094	0.01	2000	
Tl	203	1	No Gas	110.382	110.382	1.04	792864	0.01	2000	
Pb	208	1	No Gas	101.865	101.865	2.03	2684723	0.00	2000	
U	238	1	No Gas	0.173	0.173	1.84	4664	0.00	2000	
Ca	43	2	He	98555.715	98555.715	0.12	222628	44.27	200000	
Sb	121	2	He	97.346	97.346	1.63	447169	0.02	2000	
Ti	47	2	He	104.204	104.204	3.52	21397	0.49	2000	
Cu	63	1	No Gas	101.800	101.800	0.97	1006479	0.01	2000	
Zn	66	1	No Gas	103.362	103.362	1.33	281242	0.04	2000	
Se	82	1	No Gas	105.357	105.357	2.45	18621	0.57	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	735480	1.86	709619	103.64	70	120	
Ge	72	2	He	453804	0.27	445920	101.77	70	120	
Ge	72	1	No Gas	1668334	2.03	1651482	101.02	70	120	
In	115	1	No Gas	1769571	0.44	1818500	97.31	70	120	
Bi	209	1	No Gas	1452387	1.70	1577939	92.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	044_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:31:18-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
n	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	97.706	6.119	1137758	1.60	100	97.7	90	110	
Be	9	1	No Gas	94.602	4.043	326858	1.37	100	94.6	90	110	
V	51	2	He	98.772	0.376	484456	0.59	100	98.8	90	110	
Cr	52	2	He	99.290	1.019	538698	0.23	100	99.3	90	110	
Fe	56	2	He	9896.426	0.880	47307408	0.66	10000	99.0	90	110	
Se	78	2	He	94.892	1.904	8050	1.29	100	94.9	90	110	
As	75	2	He	96.125	0.911	75422	0.22	100	96.1	90	110	
Ca	44	2	He	9701.278	1.613	388712	1.38	10000	97.0	90	110	
Na	23	2	He	9928.371	1.067	9321097	0.46	10000	99.3	90	110	
Mg	24	2	He	9984.250	2.240	5841161	1.56	10000	99.8	90	110	
K	39	2	He	9951.527	0.908	7911865	1.83	10000	99.5	90	110	
Mn	55	2	He	98.518	1.200	417212	0.52	100	98.5	90	110	
Co	59	2	He	96.500	1.164	692501	0.35	100	96.5	90	110	
Ni	60	2	He	98.436	1.586	170819	1.66	100	98.4	90	110	
Cu	63	2	He	98.572	1.858	424950	1.19	100	98.6	90	110	
Zn	66	2	He	97.702	1.680	90937	0.74	100	97.7	90	110	
Al	27	2	He	98.432	1.382	44124	2.19	100	98.4	90	110	
B	11	1	No Gas	476.409	3.502	907023	1.98	500	95.3	90	110	
Al	27	1	No Gas	99.863	1.463	1318613	1.74	100	99.9	90	110	
Si	28	1	No Gas	489.607	1.819	3784223	0.68	5000	9.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.727	3.199	1243486	2.83	100	98.7	90	110	
Cd	111	1	No Gas	99.378	1.534	231233	0.88	100	99.4	90	110	
Sr	88	1	No Gas	101.027	4.361	2526404	2.85	100	101.0	90	110	
Mo	95	1	No Gas	96.997	4.222	489949	2.11	100	97.0	90	110	
Sn	118	1	No Gas	101.485	1.846	738513	1.00	100	101.5	90	110	
Sb	121	1	No Gas	100.223	2.086	1088430	1.76	100	100.2	90	110	
Ba	137	1	No Gas	99.647	1.426	385424	1.63	100	99.6	90	110	
Tl	205	1	No Gas	99.943	4.754	1854847	1.62	100	99.9	90	110	
Tl	203	1	No Gas	97.570	1.028	760010	2.11	100	97.6	90	110	
Pb	208	1	No Gas	96.878	3.286	2767192	0.45	100	96.9	90	110	
U	238	1	No Gas	99.279	2.679	2861459	1.66	100	99.3	90	110	
Ca	43	2	He	10370.641	3.797	23751	2.94	10000	103.7	90	110	
Sb	121	2	He	96.199	1.095	447543	1.27	100	96.2	90	110	
Ti	47	2	He	96.968	1.922	20165	1.95	100	97.0	90	110	
Cu	63	1	No Gas	99.799	2.007	979391	1.94	100	99.8	90	110	
Se	82	1	No Gas	99.027	1.829	17386	1.15	100	99.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	670653	5.28	709619	94.51	70	120	
Ge	72	2	He	459597	0.94	445920	103.07	70	120	
Ge	72	1	No Gas	1656115	1.16	1651482	100.28	70	120	
In	115	1	No Gas	1788216	2.31	1818500	98.33	70	120	
Bi	209	1	No Gas	1574980	3.07	1577939	99.81	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	045_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq Date Time	2023-08-07T13:33:10-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	015CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.525	7.2	51432	2.2	0.5	CCB Main CR1 Failed
Be	9	1	No Gas	0.005	71.5	73	17.2	0.5	
V	51	2	He	-0.060	-15.2	3137	0.5	2.5	
Cr	52	2	He	0.256	9.3	10978	2.0	2.5	
Fe	56	2	He	1.494	27.3	26419	6.5	100	
Se	78	2	He	0.110	52.4	163	3.5	2	
As	75	2	He	0.060	27.1	242	5.6	2.5	
Ca	44	2	He	5.881	36.2	987	9.2	100	
Na	23	2	He	16.918	18.7	105537	1.9	100	
Mg	24	2	He	1.729	30.9	1583	18.7	100	
K	39	2	He	-2.348	-123.1	137331	0.7	100	
Mn	55	2	He	-0.005	-954.8	2167	9.1	2.5	
Co	59	2	He	0.007	63.0	317	10.2	2.5	
Ni	60	2	He	0.014	218.7	233	21.1	2.5	
Cu	63	2	He	-0.056	-27.8	907	8.1	2	
Zn	66	2	He	0.022	794.7	573	27.9	2.5	
Al	27	2	He	0.468	96.0	1127	16.8	5	
B	11	1	No Gas	9.234	5.0	25201	4.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.209	-17.4	28539	2.2	5	
Si	28	1	No Gas	-3.460	-9.0	450836	0.3	10	
Ag	107	1	No Gas	0.006	111.5	353	22.9	2.5	
Cd	111	1	No Gas	0.011	64.0	30	57.7	1	
Sr	88	1	No Gas	0.006	113.8	1123	13.5	2.5	
Mo	95	1	No Gas	0.088	27.7	623	20.9	2.5	
Sn	118	1	No Gas	0.099	6.3	1887	1.6	5	
Sb	121	1	No Gas	0.147	15.4	1793	13.6	2.5	
Ba	137	1	No Gas	-0.027	-64.8	160	43.8	2.5	
Tl	205	1	No Gas	0.879	31.5	18235	29.8	1	
Tl	203	1	No Gas	0.843	27.7	7442	26.0	1	
Pb	208	1	No Gas	0.015	43.1	1483	13.6	2.5	
U	238	1	No Gas	0.027	31.2	840	30.0	2.5	
Ca	43	2	He	-6.319	-68.4	20	50.0	100	
Sb	121	2	He	0.115	6.0	610	4.3	2.5	
Ti	47	2	He	-0.082	-34.2	3	173.2	2.5	
Cu	63	1	No Gas	-0.040	-37.4	2140	6.7	2.5	
Se	82	1	No Gas	-0.903	-12.9	-16	-135.4	2	

QC ISTD Table

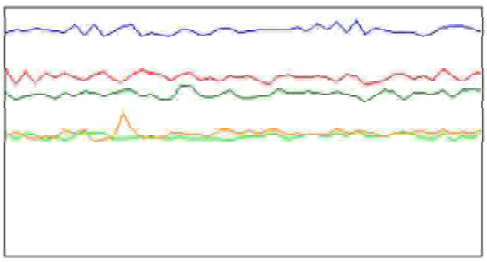
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	694006	1.54	709619	97.80	70	120	
Ge	72	2	He	460332	0.96	445920	103.23	70	120	
Ge	72	1	No Gas	1722642	0.57	1651482	104.31	70	120	
In	115	1	No Gas	1848636	1.59	1818500	101.66	70	120	
Bi	209	1	No Gas	1596770	1.13	1577939	101.19	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\080723A.b
Acq. Date-Time	8/7/2023 11:01:21 AM
Report Comment	---
Instrument Name	G8421A SG18523544

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	5000	3625	36251.66		
24	20000	9708	97084.31		
59	20000	18264	182640.51		
115	50000	24860	248602.40		
208	20000	13142	131421.37		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.150	5.000	
24	1.952	5.000	
59	1.784	5.000	
115	3.115	5.000	
208	2.163	5.000	

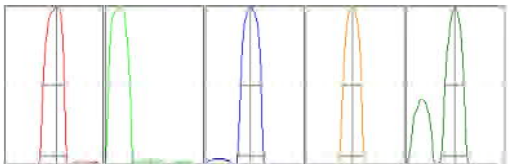
Mass	Background	Background (Required)	Background (Flag)
9	0.900		
24	1.000		
59	0.800		
115	0.600		
208	2.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.176 %
Doubly Charged	70 / 140 0.839 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	3728.05	9.10	8.90 - 9.10	
24	9859.05	23.90	23.90 - 24.10	
59	18691.58	58.90	58.90 - 59.10	
115	25144.32	114.95	114.90 - 115.10	
208	13149.23	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.66	0.789		
24	0.67	0.786		
59	0.61	0.779		
115	0.55	0.730		
208	0.59	0.777		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.48 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.4 V	Deflect	15.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	134	Axis Gain	1.0005	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.08		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-0.9 mm

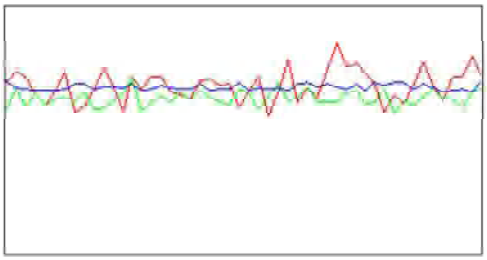
EM

Discriminator	4.7 mV	Analog HV	2967 V	Pulse HV	1613 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/ug/l]	Resp (Required) [cps/ug/l]	Resp (Flag)
9	200	137	1366.87		
24	1000	631	6306.42		
59	10000	6755	67547.88		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

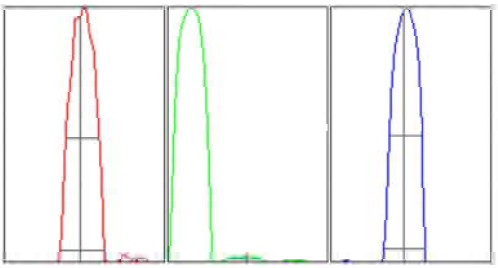
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.449	5.000	Fail
24	4.723	5.000	
59	1.984	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.300		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.663 %
Doubly Charged	70 / 140 0.975 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	134.01	8.95	8.90 - 9.10	
24	656.18	24.00	23.90 - 24.10	
59	6810.12	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.823		
24	0.64	0.787		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.774		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.48 L/min	Dilution Gas	0.57 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.2 V	Deflect	0.4 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.6 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	134	Axis Gain	1.0005	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.08		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-0.9 mm

EM

Discriminator	4.7 mV	Analog HV	2967 V	Pulse HV	1613 V

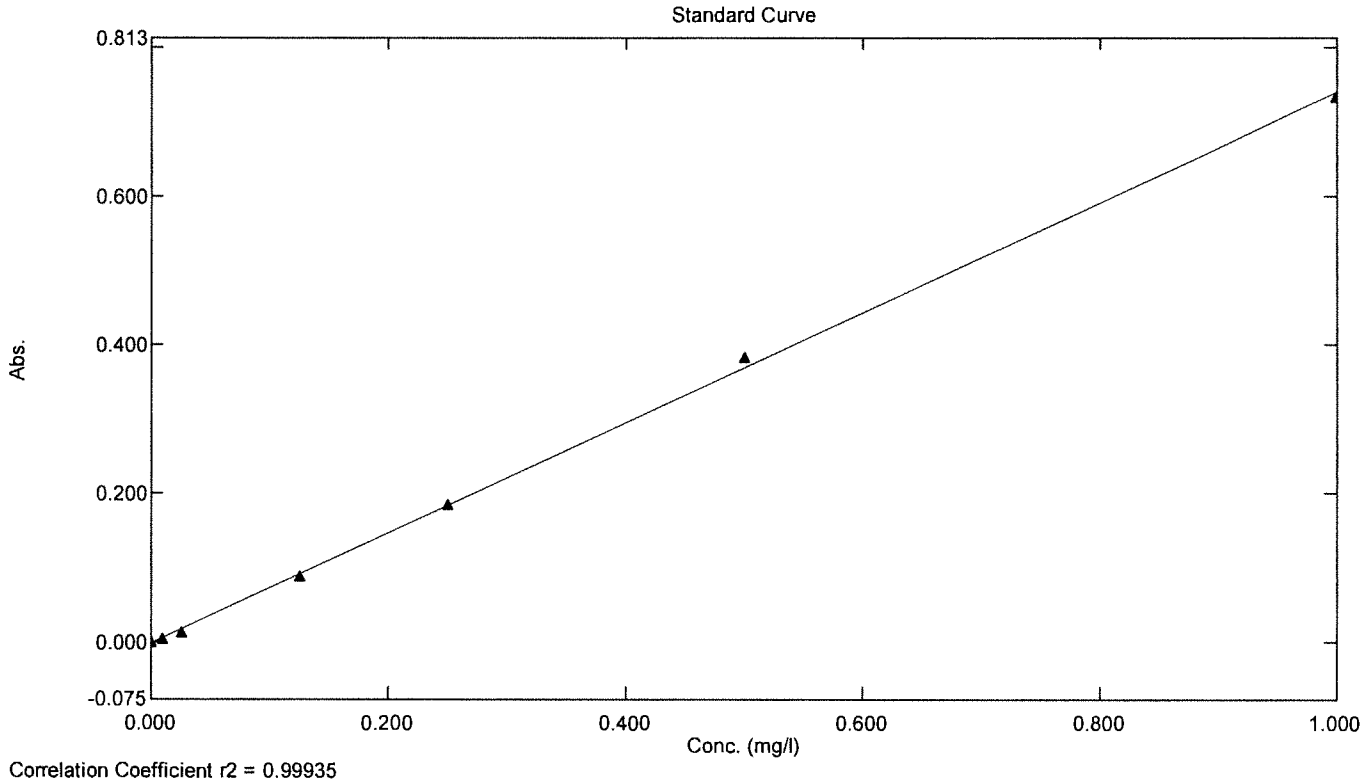
HS23080102 Wetchem Cr6_W

ALS WO# HS23080102

Standard Table Report

08/08/2023 05:02:42 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\CR6+_UNKNOWN\2023\08082023CR6_W.pho..pho



Correlation Coefficient r2 = 0.99935

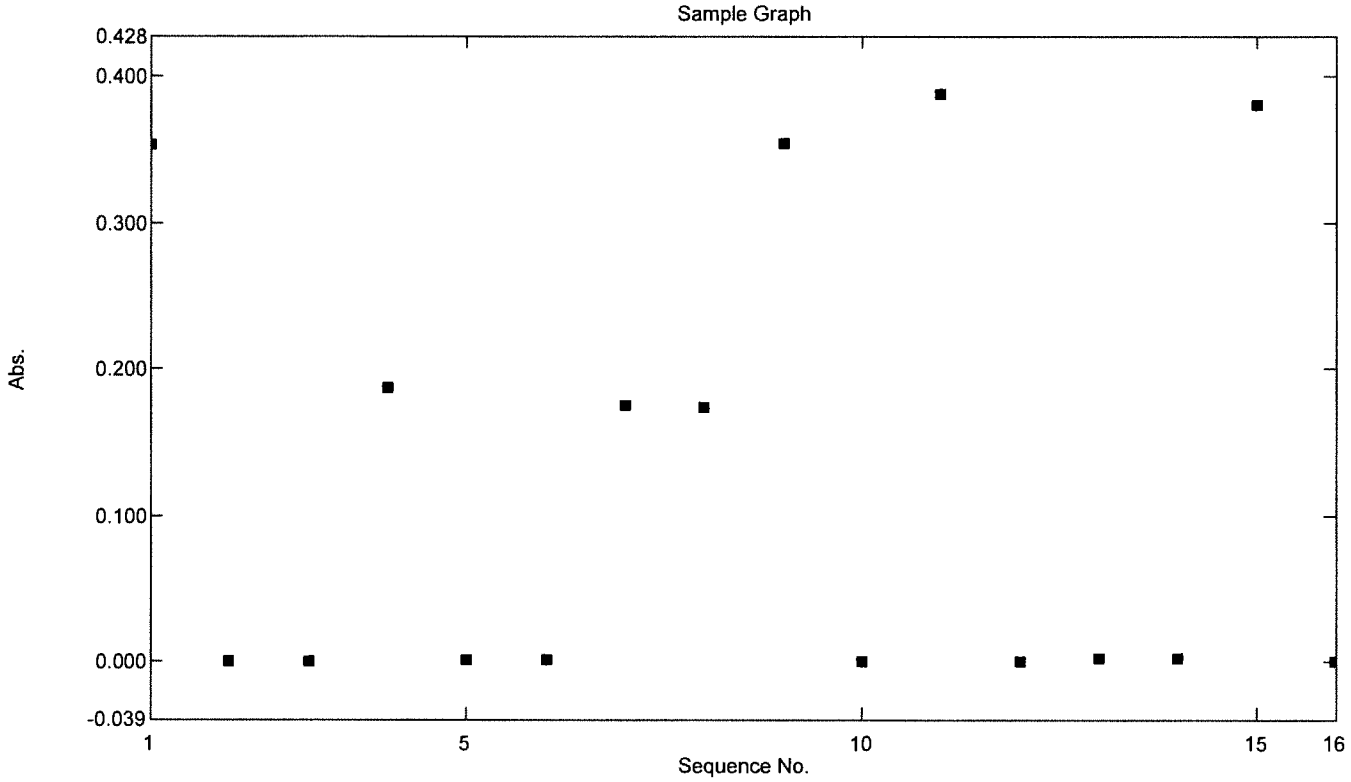
Standard Table

	Sample ID	Type	Ex	Conc	WL540.0	Wgt.Factor	Comments
1	STD1	Standard		0.000	0.000	1.000	
2	STD2	Standard		0.010	0.004	1.000	
3	STD3	Standard		0.025	0.013	1.000	
4	STD4	Standard		0.125	0.089	1.000	
5	STD5	Standard		0.250	0.186	1.000	
6	STD6	Standard		0.500	0.383	1.000	
7	STD7	Standard		1.000	0.733	1.000	10/13/2023
8							

Sample Table Report

08/08/2023 05:02:54 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\CR6+_UNKNOWN\2023\08082023CR6_W.pho..pho



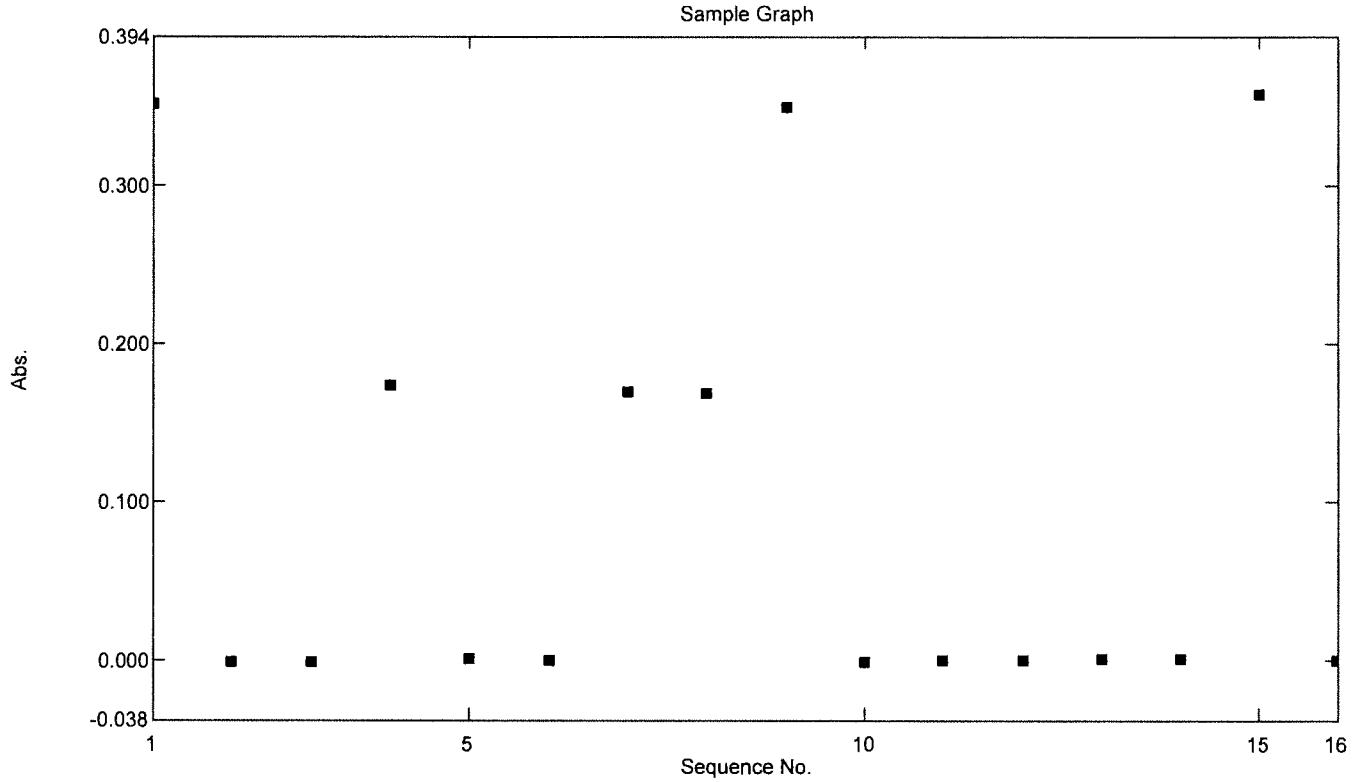
Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL540.0	Comments
1	CCV	Unknown		08/08/2023	10:27:22 AM	0.479	0.354	3221433606 IC-4
2	CCB	Unknown		08/08/2023	10:27:33 AM	0.001	-0.000	3100606911
3	MBLK	Unknown		08/08/2023	10:27:35 AM	0.001	0.000	3221433605 IC-4
4	LCS	Unknown		08/08/2023	10:27:55 AM	0.254	0.187	322142602 UV-03
5	HS23080437.01	Unknown		08/08/2023	10:28:22 AM	0.002	0.001	-0.001
6	HS23080437.01BKG	Unknown		08/08/2023	10:28:24 AM	0.003	0.001	PF:50X
7	HS23080437.01MS	Unknown		08/08/2023	10:28:54 AM	0.237	0.175	PF:50X
8	HS23080437.01MSD	Unknown		08/08/2023	10:28:56 AM	0.237	0.175	PF:50X
9	CCV2	Unknown		08/08/2023	10:29:09 AM	0.480	0.355	
10	CCB2	Unknown		08/08/2023	10:29:19 AM	0.002	0.000	
11	CCV3	Unknown		08/08/2023	05:01:09 PM	0.526	0.389	
12	CCB3	Unknown		08/08/2023	05:01:15 PM	0.001	0.000	
13	HS23080505.01	Unknown		08/08/2023	05:02:10 PM	0.005	0.003	OOH
14	HS23080505.01BKG	Unknown		08/08/2023	05:02:12 PM	0.005	0.003	0.000
15	CCV4	Unknown		08/08/2023	05:02:31 PM	0.515	0.381	
16	CCB4	Unknown		08/08/2023	05:02:37 PM	0.001	0.000	
17								

Sample Table Report

08/08/2023 05:35:06 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\CR6+_UNKNOWN\2023\08022023CR6_W.pho



Sample Table

	Sample ID	Type	Ex	Date	Time	Conc	WL540.0	Comments
1	CCV	Unknown		08/02/2023	10:35:21 AM	0.475	0.351	3221433606 IC-4
2	CCB	Unknown		08/02/2023	10:35:33 AM	-0.001	-0.001	3100606911
3	MBLK	Unknown		08/02/2023	10:35:36 AM	-0.001	-0.001	32221433605 IC-5
4	LCS	Unknown		08/02/2023	10:35:42 AM	0.236	0.174	322142602 UV-3
5	HS23080061.01	Unknown		08/02/2023	10:36:28 AM	0.003	0.001	PF:50X
6	HS23080061.01BKG	Unknown		08/02/2023	10:36:30 AM	0.000	-0.001	
7	HS23080061.01MS	Unknown		08/02/2023	10:37:09 AM	0.230	0.169	PF:50X
8	HS23080061.01MSD	Unknown		08/02/2023	10:37:12 AM	0.230	0.169	PF:50X
9	CCV2	Unknown		08/02/2023	10:37:20 AM	0.474	0.350	
10	CCB2	Unknown		08/02/2023	10:37:26 AM	-0.001	-0.002	
11	HS23080101.01	Unknown		08/02/2023	11:43:14 AM	0.000	-0.001	
12	HS23080101.01BKG	Unknown		08/02/2023	11:43:16 AM	0.000	-0.001	0.000
13	HS23080101.02	Unknown		08/02/2023	11:43:35 AM	0.003	0.001	
14	HS23080101.02BKG	Unknown		08/02/2023	11:43:38 AM	0.003	0.001	
15	CCV3	Unknown		08/02/2023	11:44:03 AM	0.485	0.358	
16	CCB3	Unknown		08/02/2023	11:44:12 AM	0.001	-0.000	
17								

HS2308 0102-01

HS23080102-E2300709 Perchlorate Final Report IV

ALS WO# HS23080102

August 09, 2023 Service Request No:E2300709

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080102

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 02, 2023
For your reference, these analyses have been assigned our service request number **E2300709.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300709
Project:	HS23080102	**Date Received:**	08/02/23
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt.

One sample was received for analysis at ALS Environmental in Houston on 08/02/23.

The sample was received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300381: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300709
Project: HS23080102

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300709-001	LH18/24-SP140_080123	8/1/2023	1300

Service Request Summary

Folder #: **E2300709**
Client Name: ALS Environmental - US
Project Name: HS23080102
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
Internal Due Date: 8/9/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080102
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300709-001	LH18/24-SP140_080123	Water	08/01/23 1300	IV

Service Request Summary

Folder #: **E2300709**
Client Name: ALS Environmental - US
Project Name: HS23080102
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/02/23
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QAP: LAB QAP
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P.O. Number: HS23080102
EDD: BASIC_WQC_CASNo_LOD

1 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

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Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22576

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080102
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080102-01**	**LH18/24-SP140_080123**	**Water**	**01 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			09 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: NP Date/Time:

Received By: Date/Time: 8-2-23 1645

Cooler ID(s): Temperature(s):

Cooler Receipt Form

ALS Environmental

Project Chemist JH

Client/Project ALS

Thermometer ID 1234

Date/Time Received: 8-2-23 Initials: LJ

Date/Time Logged in: 8.2.23 Initials LJ

1. Method of delivery: ◯ US Mail ◯ Fed Ex ◯ UPS ◯ DHL ☒ ALS Courier ◯ Client

2. Samples received in: ☒ Cooler ◯ Box ◯ Envelope ◯ Other

3. Were custody seals on coolers? ◯ Yes ☒ No

Were they intact? ◯ Yes ◯ No ☒ N/A

Were they signed and dated? ◯ Yes ◯ No ☒ N/A

If yes, how many and where?

4. Packing Material: ◯ Inserts ☒ Baggies ◯ Bubble Wrap ◯ Gel Packs ☒ Wet Ice ◯ Sleeves ◯ Other

5. Foreign or Regulated Soil? ◯ Yes ◯ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-2-23	1049	LJ	5.2	☑
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ☒ Yes ◯ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ☒ Yes ◯ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ☒ Yes ◯ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ☒ Yes ◯ No

10. Did sample labels and tags agree with custody documents? ☒ Yes ◯ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300708-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2300709-001	LH18/24-SP140_080123	.01	6850/ClO4 DOD			Water	10mL	
3	E2300711-001	04WW09_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300711-002	04WW10_080123	.02	6850/ClO4 DOD			Ground Water	10mL	
5	E2300711-003	04WW05_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300711-004	04WW11_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300711-005	04WW07_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300711-006	04WW07_080123_a	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300711-007	04WW04_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300711-008	04WW01_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300716-001	1824DPTMW07_080223	.01	6850/ClO4 DOD			Water	10mL	
12	E2300718-001	LH18/24-SP650_080823_Between IX	.01	6850/ClO4 DOD			Water	10mL	
13	E2300718-002	LH18/24-SP650_080823_AIX	.01	6850/ClO4 DOD			Water	10mL	
14	E2300718-003	LH18/24-SP650_080823_BIX	.01	6850/ClO4 DOD			Water	10mL	
15	EQ2300381-01	MB		6850/ClO4			Liquid	10mL	
16	EQ2300381-02	LCS		6850/ClO4			Liquid	10mL	
17	EQ2300381-03	DLCS		6850/ClO4			Liquid	10mL	
18	EQ2300381-04	04WW10_080123 MS	.02	6850/ClO4 DOD			Liquid	10mL	
19	EQ2300381-05	04WW10_080123 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
20	K2308781-001	LGAC-INF-080723	.01	6850/ClO4			Water	10mL	
21	K2308781-002	LGAC-INT1-080723	.01	6850/ClO4			Water	10mL	
22	K2308781-003	LGAC-INT2-080723	.01	6850/ClO4			Water	10mL	
23	R2306562-017	2307210621 PFE-1	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300381-02	1.00µL	EQ2300381-02	1.00µL	EQ2300381-03	1.00µL	EQ2300381-03	1.00µL	EQ2300381-04	1.00µL	EQ2300381-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300708-001	100.00µL	E2300709-001	100.00µL	E2300711-001	100.00µL	E2300711-002	100.00µL	E2300711-003	100.00µL	E2300711-004	100.00µL
E2300711-005	100.00µL	E2300711-006	100.00µL	E2300711-007	100.00µL	E2300711-008	100.00µL	E2300716-001	100.00µL	E2300718-001	100.00µL
E2300718-002	100.00µL	E2300718-003	100.00µL	EQ2300381-01	100.00µL	EQ2300381-01	100.00µL	EQ2300381-02	100.00µL	EQ2300381-02	100.00µL
EQ2300381-03	100.00µL	EQ2300381-03	100.00µL	EQ2300381-04	100.00µL	EQ2300381-05	100.00µL	K2308781-001	100.00µL	K2308781-002	100.00µL
K2308781-003	100.00µL	R2306562-017	100.00µL								

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/9/23 09:01
Finished: 8/9/23 09:53
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	8/ 1/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 2/23
Sample Name:	LH18/24-SP140_080123	**Units:**	µg/L
Lab Code:	E2300709-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**17200**		100	50.0	25.0	1000	8/ 9/23	8/9/23 11:19	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300381-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:23	424245	813305	

Accuracy & Precision

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10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080102
Sample Matrix: Water

Service Request: E2300709
Date Analyzed: 8/ 9/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424245

	Lab Control Sample EQ2300381-02			Duplicate Lab Control Sample EQ2300381-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.102	0.100	102	84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:34	424245	813305	

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230802-001	Perchlorate6850c.lcm	1x		8/2/2023 13:05
2	IB		2230802-002	Perchlorate6850c.lcm	1x		8/2/2023 13:11
3	Perchlorate ICAL 1		2230802-003	Perchlorate6850c.lcm	1x	230373	8/2/2023 13:17
4	Perchlorate ICAL 2		2230802-004	Perchlorate6850c.lcm	1x	230375	8/2/2023 13:23
5	Perchlorate ICAL 3		2230802-005	Perchlorate6850c.lcm	1x	230376	8/2/2023 13:28
6	Perchlorate ICAL 4		2230802-006	Perchlorate6850c.lcm	1x	230377	8/2/2023 13:34
7	Perchlorate ICAL 5		2230802-007	Perchlorate6850c.lcm	1x	230378	8/2/2023 13:39
8	Perchlorate ICAL 6		2230802-008	Perchlorate6850c.lcm	1x	230379	8/2/2023 13:45
9	Perchlorate ICAL 7		2230802-009	Perchlorate6850c.lcm	1x	230380	8/2/2023 13:50
10	Perchlorate ICAL 8		2230802-010	Perchlorate6850c.lcm	1x	230381	8/2/2023 13:56
11	Perchlorate ICAL 9		2230802-011	Perchlorate6850c.lcm	1x	230382	8/2/2023 14:02
12	Perchlorate ICAL 10		2230802-012	Perchlorate6850c.lcm	1x	230383	8/2/2023 14:07
13	PerchlorateICV		2230802-013	Perchlorate6850c.lcm	1x	230385	8/2/2023 14:19

Initial Calibration - Detailed Report

Calibration ID: EC2300012 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300012-01	Perchlorate ICAL 1	2230802-003	08/02/2023 13:17
02	EC2300012-02	Perchlorate ICAL 2	2230802-004	08/02/2023 13:23
03	EC2300012-03	Perchlorate ICAL 3	2230802-005	08/02/2023 13:28
04	EC2300012-04	Perchlorate ICAL 4	2230802-006	08/02/2023 13:34
05	EC2300012-05	Perchlorate ICAL 5	2230802-007	08/02/2023 13:39
06	EC2300012-06	Perchlorate ICAL 6	2230802-008	08/02/2023 13:45
07	EC2300012-07	Perchlorate ICAL 7	2230802-009	08/02/2023 13:50
08	EC2300012-08	Perchlorate ICAL 8	2230802-010	08/02/2023 13:56
09	EC2300012-09	Perchlorate ICAL 9	2230802-011	08/02/2023 14:02
10	EC2300012-10	Perchlorate ICAL 10	2230802-012	08/02/2023 14:07

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.086** **Average RF = 0.1475**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1428	02	0.5000	0.1421	03	0.7000	0.1457	04	1.0000	0.149
05	2.0000	0.1515	06	5.0000	0.1475	07	10.0000	0.1503	08	20.0000	0.1477
09	30.0000	0.1485	10	50.0000	0.1496						

Analyte

Perchlorate RSE = 2.09

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0968	-3.2	02	0.5000	0.482	-3.6	03	0.7000	0.692	-1.2
04	1.0000	1.01	1.0	05	2.0000	2.05	2.7	06	5.0000	5.00	-0.0
07	10.0000	10.2	1.9	08	20.0000	20.0	0.2	09	30.0000	30.2	0.7
10	50.0000	50.7	1.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300012	**Instrument ID:**	E-LCMS-01
Datafile ID:	2230802-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300012-11	T	Average RF	10	10.670	ng/mL	6.7	<= 15

Insight Report

Printed at 8/3/2023 9:30:46 AM

Method File: I:\LCMS01\DATA\20230802\20230802ICAL.lcm
Project File: I:\LCMS01\DATA\20230802\no use\20230802ICAL.damlp

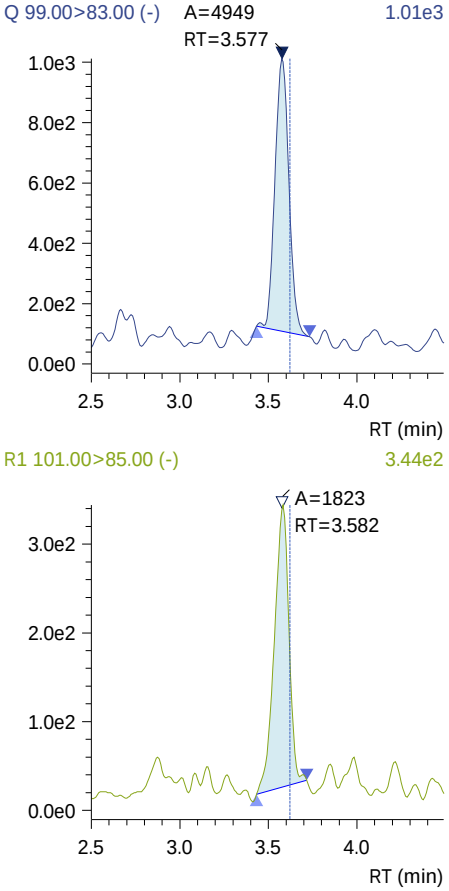
Perchlorate ICAL 1

Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	4949	346538	0.0968	ng/mL	101.00 >85.00	36.83	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.572	346538	346538	1.0000	ng/mL	----	----	

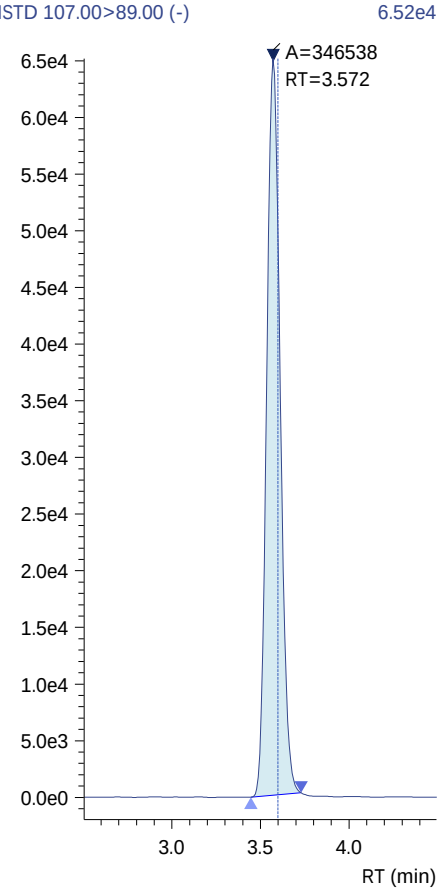
Perchlorate

Conc 0.0968
R#1 36.83 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

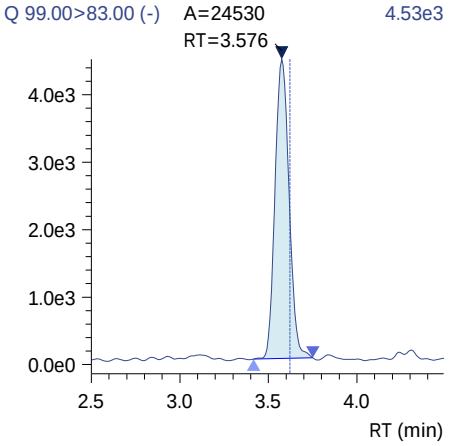
Perchlorate ICAL 2

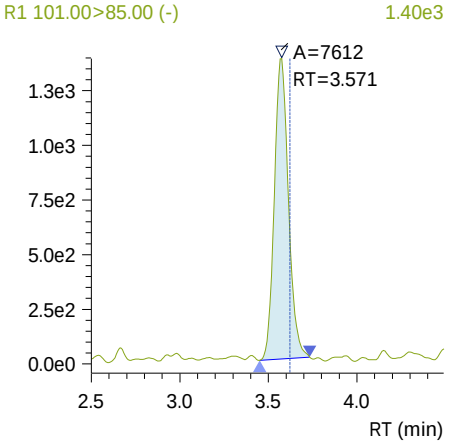
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	24530	345149	0.4820	ng/mL	101.00 >85.00	31.03	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.571	345149	345149	1.0000	ng/mL	----	----	

Perchlorate

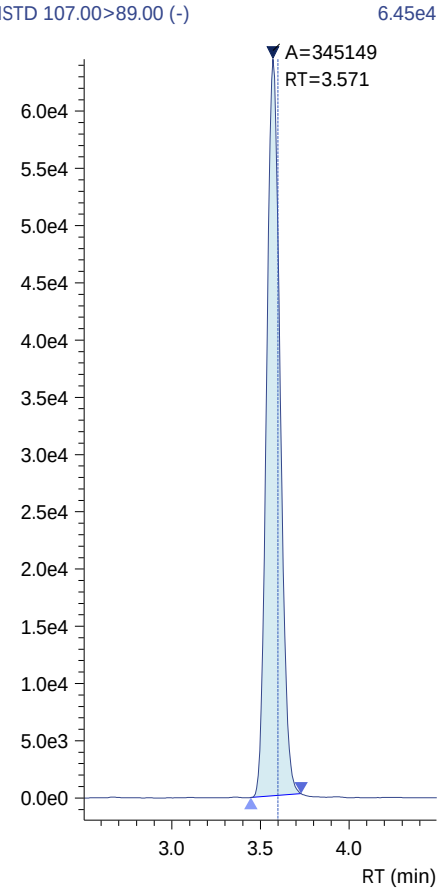
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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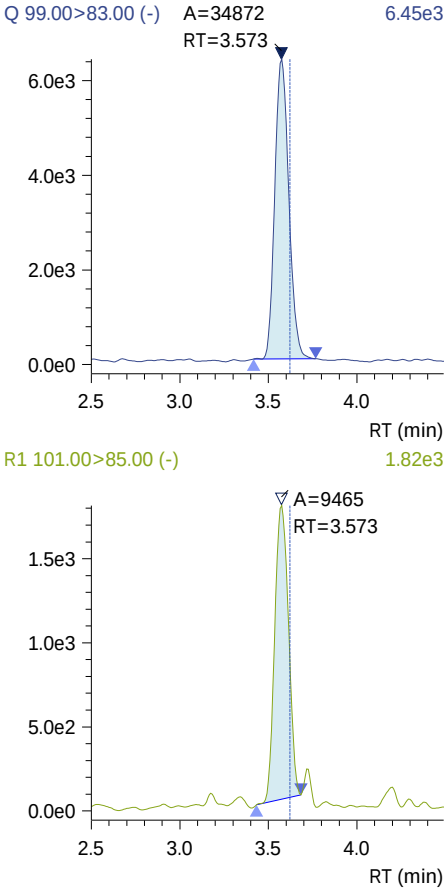
Perchlorate ICAL 3

Sample ID: Perchlorate ICAL 3
Date Acquired: 8/2/2023 1:28:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-005.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	34872	341974	0.6915	ng/mL	101.00 >85.00	27.14	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	341974	341974	1.0000	ng/mL	----	----	

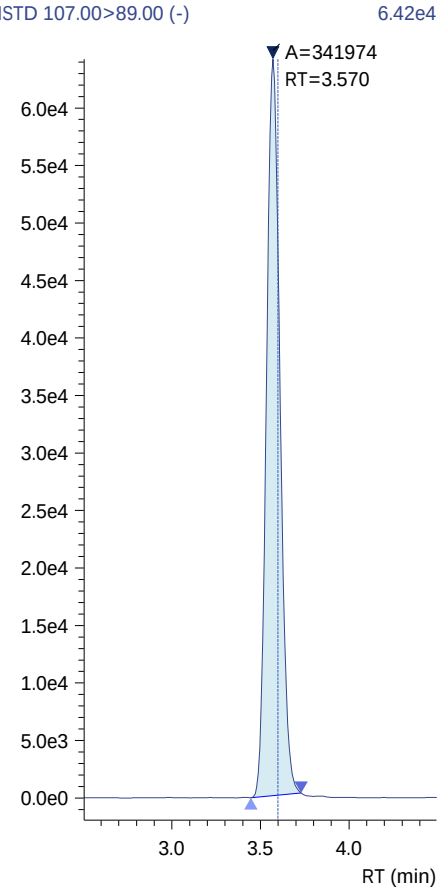
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

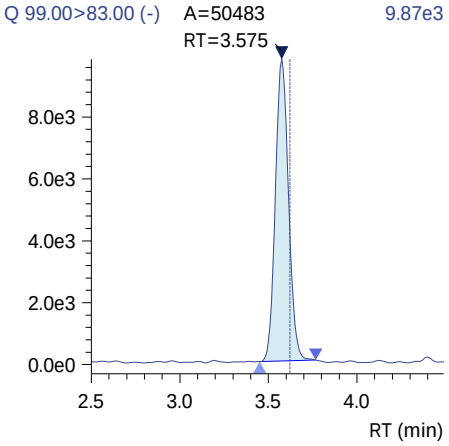
Perchlorate ICAL 4

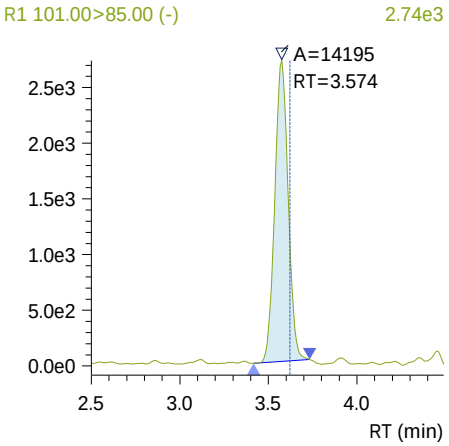
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	50483	338838	1.0104	ng/mL	101.00 >85.00	28.12	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	338838	338838	1.0000	ng/mL	----	----	

Perchlorate

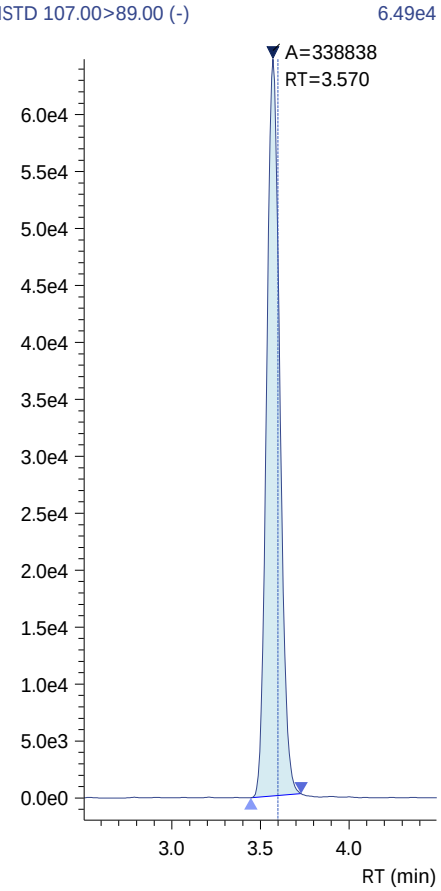
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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Perchlorate ICAL 5

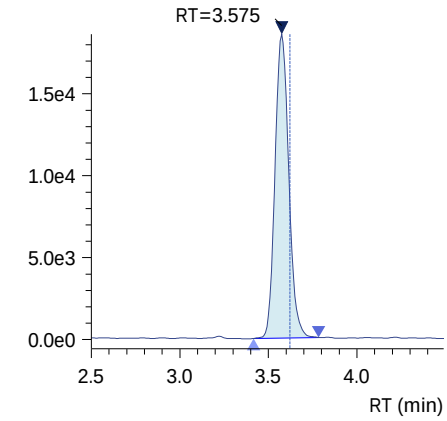
Sample ID: Perchlorate ICAL 5
Date Acquired: 8/2/2023 1:39:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-007.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	100319	331124	2.0545	ng/mL	101.00 >85.00	27.89	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	331124	331124	1.0000	ng/mL	----	----	

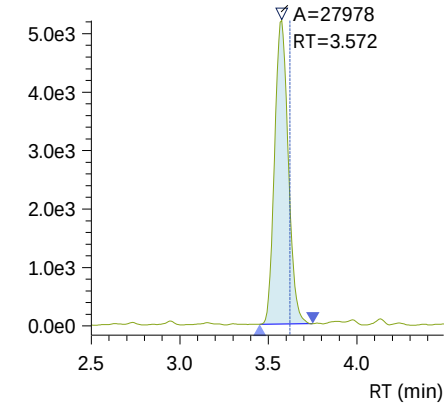
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)

Q 99.00>83.00 (-) A=100319 1.86e4



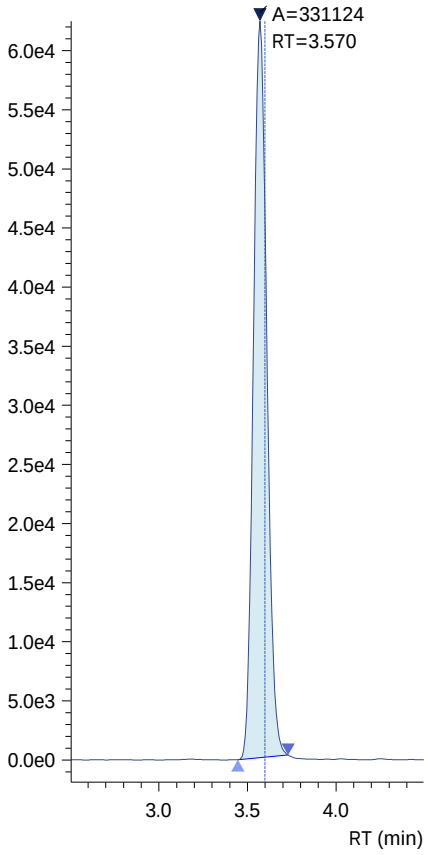
R1 101.00>85.00 (-) 5.22e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.25e4



Insight Report

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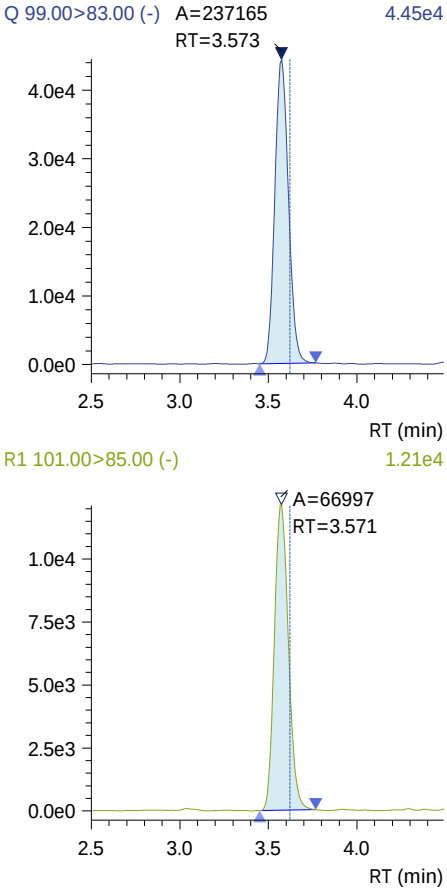
Perchlorate ICAL 6

Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	237165	321666	5.0000	ng/mL	101.00 >85.00	28.25	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	321666	321666	1.0000	ng/mL	----	----	

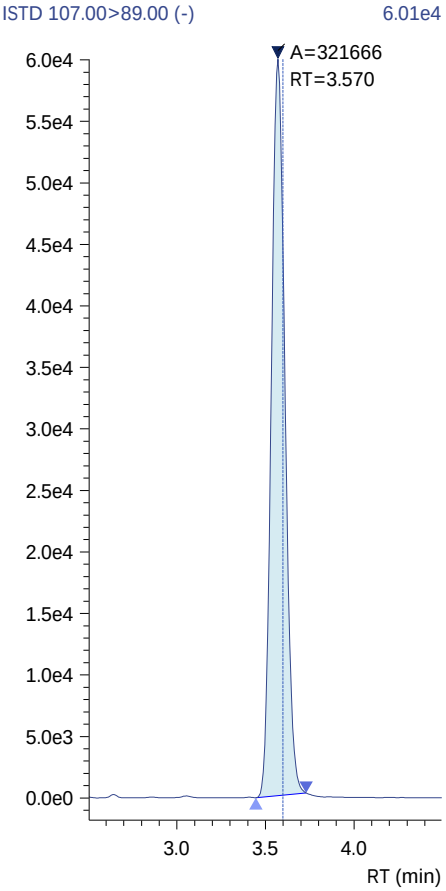
Perchlorate

Conc 5.0000
R#1 28.25 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 7

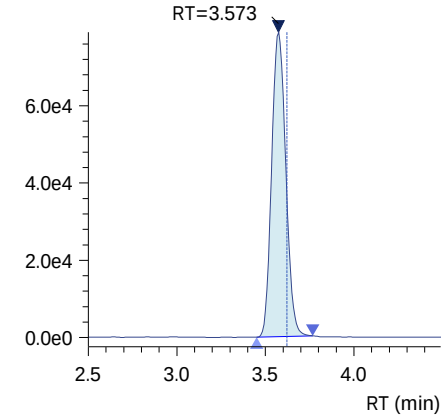
Sample ID: Perchlorate ICAL 7
Date Acquired: 8/2/2023 1:50:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-009.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	437614	291215	10.1905	ng/mL	101.00 >85.00	28.36	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291215	291215	1.0000	ng/mL	----	----	

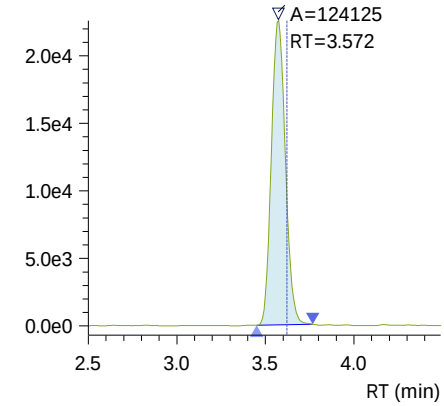
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)

Q 99.00>83.00 (-) A=437614 RT=3.573 7.90e4



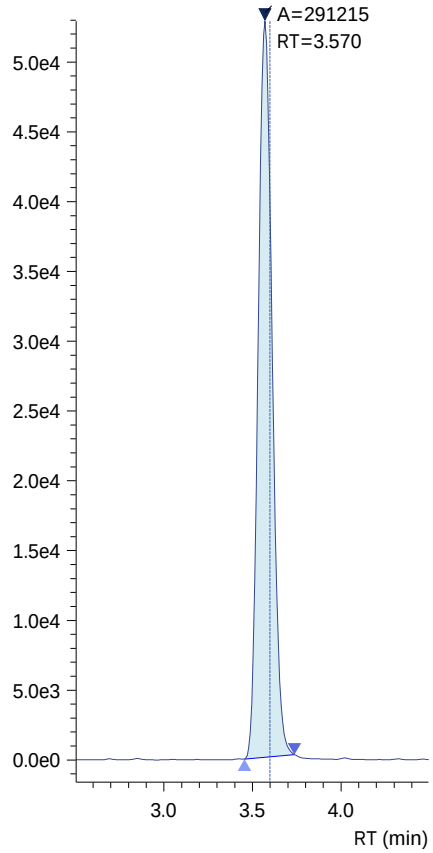
R1 101.00>85.00 (-) 2.26e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.29e4



Insight Report

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Perchlorate ICAL 8

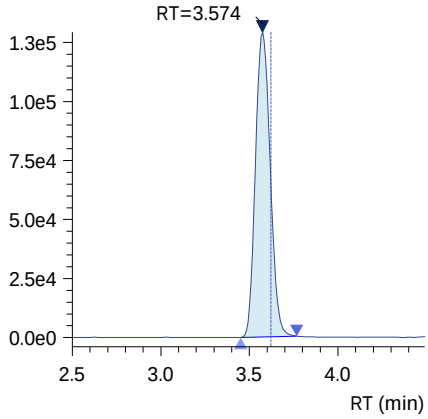
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	749856	253829	20.03 36	ng/mL	101.00 >85.00	28.56	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.569	253829	253829	1.0000	ng/mL	----	----	

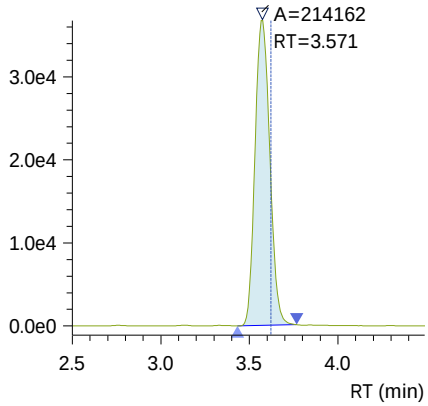
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



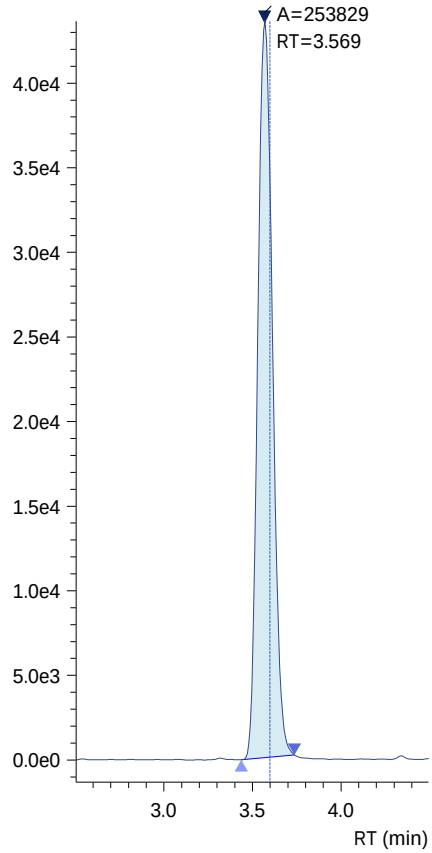
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 9

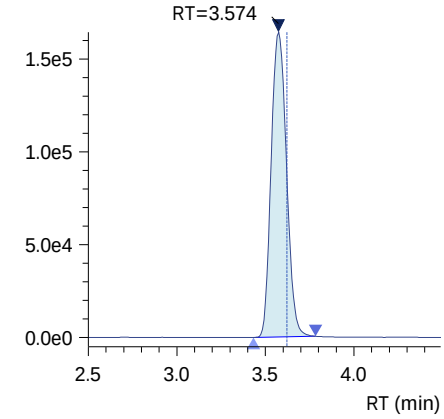
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	990671	222379	30.2105	ng/mL	101.00 >85.00	27.95	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.568	222379	222379	1.0000	ng/mL	----	----	

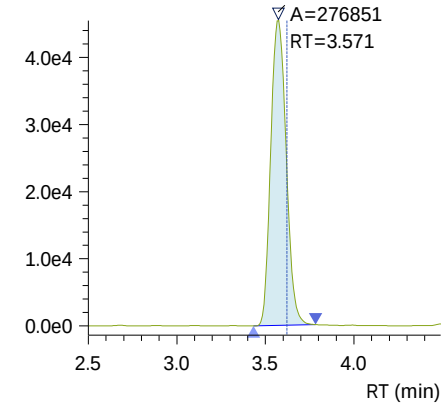
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 1.64e5



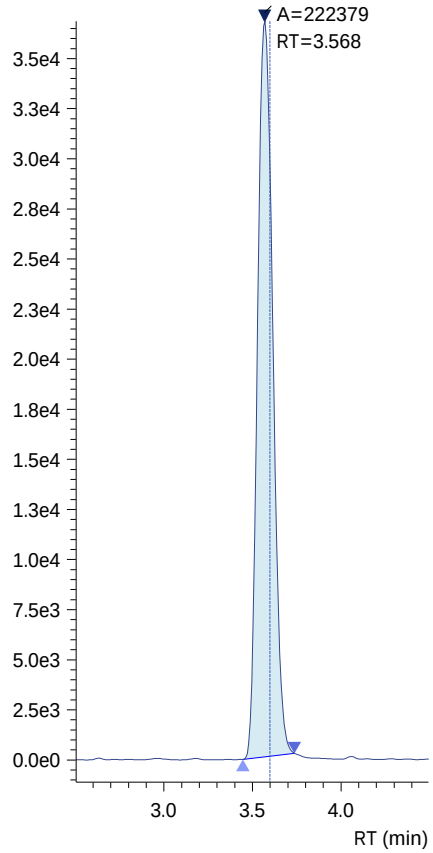
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 10

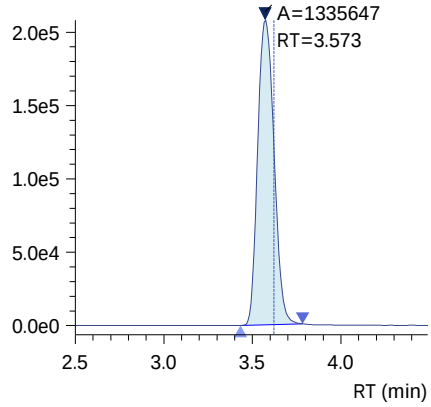
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1335647	178573	50.72 20	ng/mL	101.00 >85.00	28.04	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.567	178573	178573	1.0000	ng/mL	----	----	

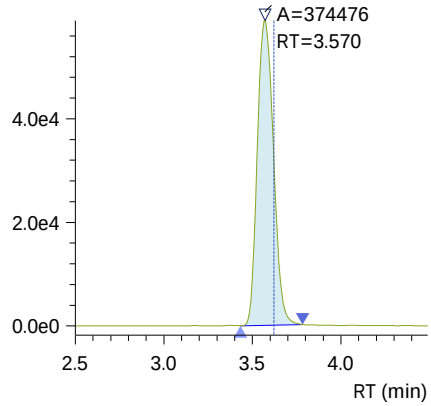
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



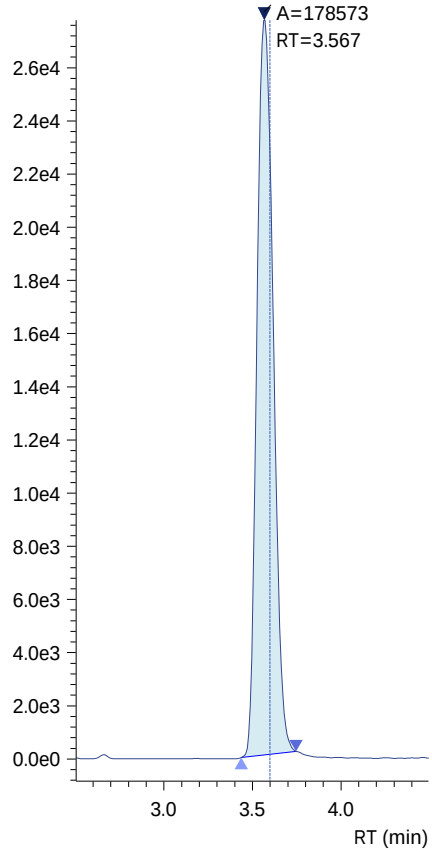
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

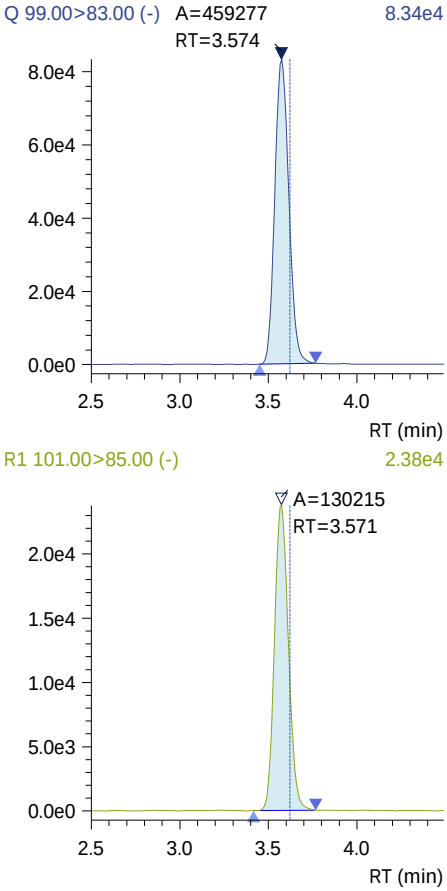
PerchlorateICV

Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	459277	291890	10.6703	ng/mL	101.00 >85.00	28.35	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291890	291890	1.0000	ng/mL	----	----	

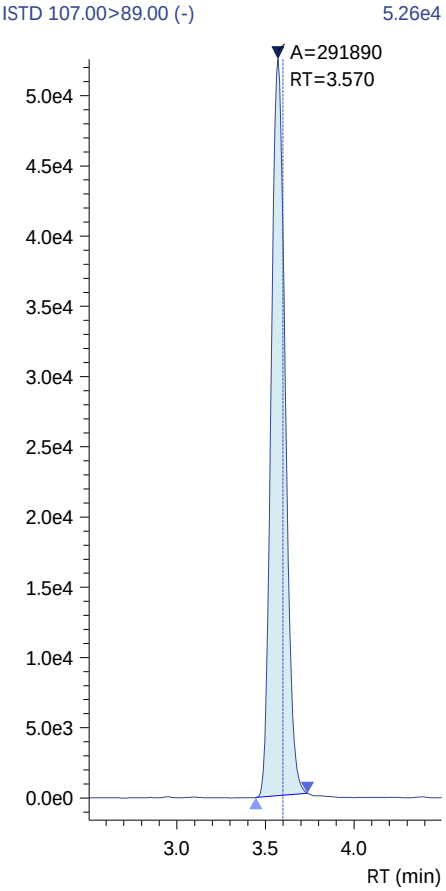
Perchlorate

Conc 10.6703
R#1 28.35 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230808-813305

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230808-001	Perchlorate6850c.lcm	1x		8/9/2023 9:59
2	LODV		2230808-002	Perchlorate6850c.lcm	1x	230386	8/9/2023 10:04
3	ICS		2230808-003	Perchlorate6850c.lcm	1x		8/9/2023 10:10
4	CCV		2230808-004	Perchlorate6850c.lcm	1x	230380	8/9/2023 10:18
5	EQ2300381-01		2230808-005	Perchlorate6850c.lcm	1x		8/9/2023 10:23
6	EQ2300381-02		2230808-006	Perchlorate6850c.lcm	1x		8/9/2023 10:29
7	EQ2300381-03		2230808-007	Perchlorate6850c.lcm	1x		8/9/2023 10:34
8	K2308781-001		2230808-008	Perchlorate6850c.lcm	1x		8/9/2023 10:46
9	K2308781-002		2230808-009	Perchlorate6850c.lcm	1x		8/9/2023 10:51
10	K2308781-003		2230808-010	Perchlorate6850c.lcm	1x		8/9/2023 10:57
11	R2306562-017		2230808-011	Perchlorate6850c.lcm	1x		8/9/2023 11:02
12	E2300716-001		2230808-012	Perchlorate6850c.lcm	1x		8/9/2023 11:08
13	E2300708-001		2230808-013	Perchlorate6850c.lcm	1x		8/9/2023 11:14
14	E2300709-001		2230808-014	Perchlorate6850c.lcm	1000x		8/9/2023 11:19
15	CCV		2230808-015	Perchlorate6850c.lcm	1x	230380	8/9/2023 11:25
16	E2300711-002		2230808-017	Perchlorate6850c.lcm	1x		8/9/2023 11:36
17	EQ2300381-04		2230808-018	Perchlorate6850c.lcm	1x		8/9/2023 11:41
18	EQ2300381-05		2230808-019	Perchlorate6850c.lcm	1x		8/9/2023 11:47
19	E2300711-001		2230808-016	Perchlorate6850c.lcm	1x	DNU-IS	8/9/2023 11:30
20	E2300711-003		2230808-020	Perchlorate6850c.lcm	1x		8/9/2023 11:53
21	E2300711-004		2230808-021	Perchlorate6850c.lcm	1x		8/9/2023 11:58
22	E2300711-005		2230808-022	Perchlorate6850c.lcm	1x		8/9/2023 12:04
23	E2300711-006		2230808-023	Perchlorate6850c.lcm	1x		8/9/2023 12:09
24	E2300711-007		2230808-024	Perchlorate6850c.lcm	1x		8/9/2023 12:15
25	E2300711-008		2230808-025	Perchlorate6850c.lcm	1x		8/9/2023 12:20
26	CCV		2230808-026	Perchlorate6850c.lcm	1x	230380	8/9/2023 12:26
27	E2300711-001		2230808-027	Perchlorate6850c.lcm	1x		8/9/2023 12:44
28	E2300718-001		2230808-028	Perchlorate6850c.lcm	1x		8/9/2023 13:06
29	E2300718-002		2230808-029	Perchlorate6850c.lcm	1x		8/9/2023 13:12
30	E2300718-003		2230808-030	Perchlorate6850c.lcm	10x		8/9/2023 13:29
32	CCV		2230803-031	Perchlorate6850c.lcm	1x	230380	8/3/2023 12:04

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Analyzed:**	8/9/23 10:18

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-004	**Lab Code:**	EQ2300385-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-01	293,010	3.58
Method Blank	EQ2300381-01	348,388	3.58
Lab Control Sample	EQ2300381-02	345,049	3.58
Duplicate Lab Control Sample	EQ2300381-03	340,635	3.58
LH18/24-SP140_080123	E2300709-001	262,026	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Analyzed:**	8/9/23 11:25

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-015	**Lab Code:**	EQ2300385-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-02	289,217	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Analyzed:**	8/9/23 12:26

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-026	**Lab Code:**	EQ2300385-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-03	292,242	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300709
Project:	HS23080102	**Date Analyzed:**	8/9/23 13:38

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-031	**Lab Code:**	EQ2300385-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-04	288,788	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080102

Service Request: E2300709
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-004

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1513	2.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080102

Service Request: E2300709
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1511	2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080102

Service Request: E2300709
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-026

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1495	1.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080102

Service Request: E2300709
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-031

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1505	2.1	NA	± 15 %	Average RF

Insight Report

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Method File: I:\LCMS01\DATA\20230808\20230808.lcm
Project File: I:\LCMS01\DATA\20230808\20230808.damlp

IB

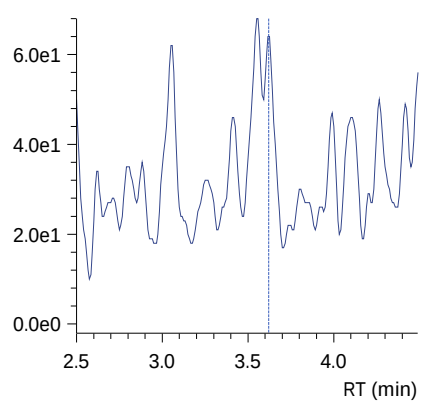
Sample ID: IB
Date Acquired: 8/9/2023 9:59:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	376063	----	ng/mL	101.00 >85.00	0.00	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.582	376063	376063	1.0000	ng/mL	----	----	

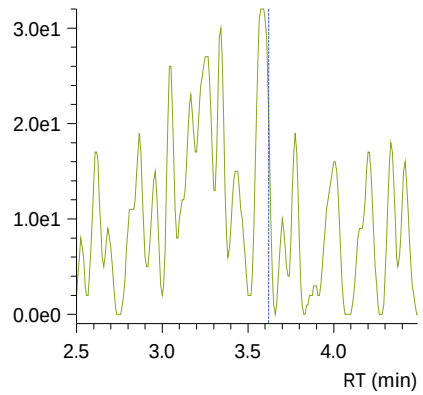
Perchlorate

Conc ----
R#1 0.00 (27.74)

Q 99.00>83.00 (-) 6.80e1



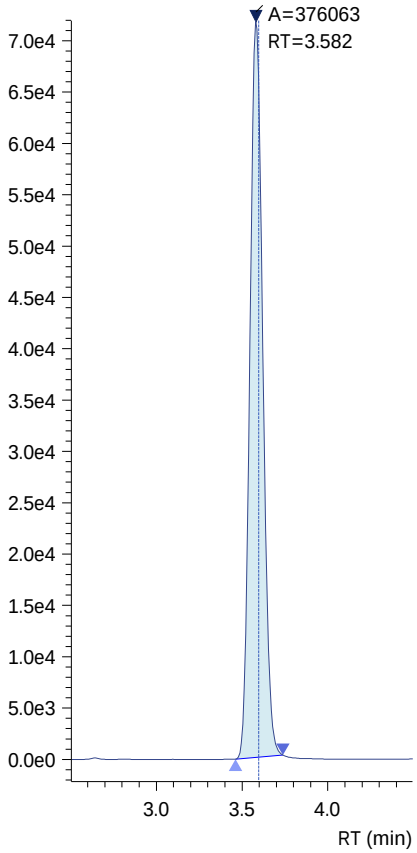
R1 101.00>85.00 (-) 3.20e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.20e4



Insight Report

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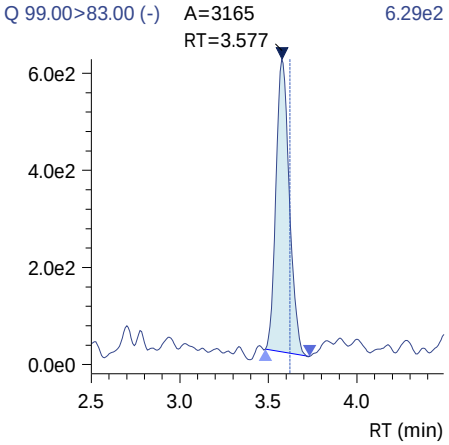
LODV

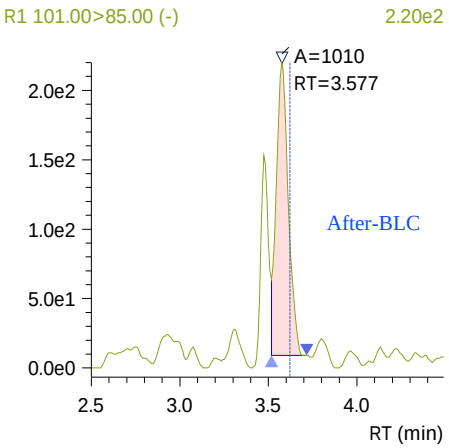
Sample ID: LODV
Date Acquired: 8/9/2023 10:04:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.577	3165	350096	0.0613	ng/mL	101.00 >85.00	31.90	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	350096	350096	1.0000	ng/mL	----	----	

Perchlorate

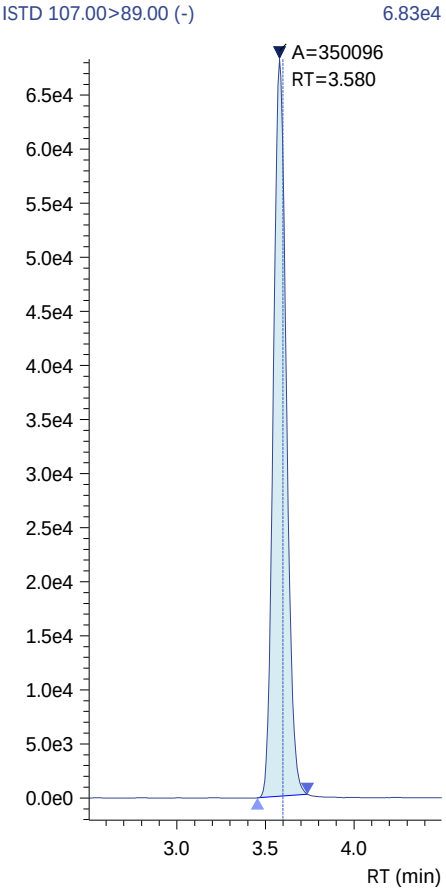
Conc 0.0613
R#1 31.90 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:59:12 PM

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Project File: I:\LCMS01\DATA\20230808\20230808.damlp

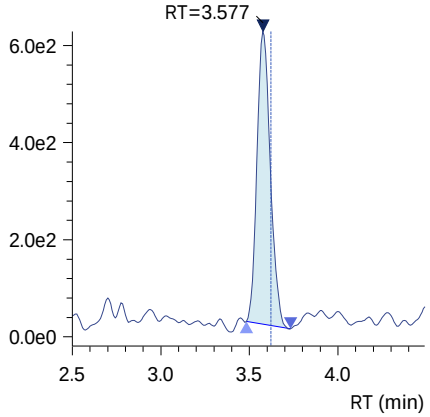
LODV

Sample ID: LODV
Date Acquired: 8/9/2023 10:04:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

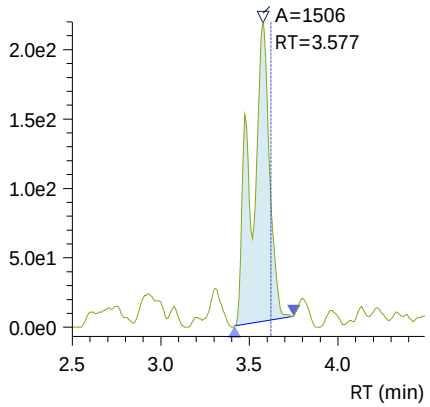
Perchlorate

Conc 0.0613
R#1 47.59 (27.74)

Q 99.00>83.00 (-) A=3165 6.29e2



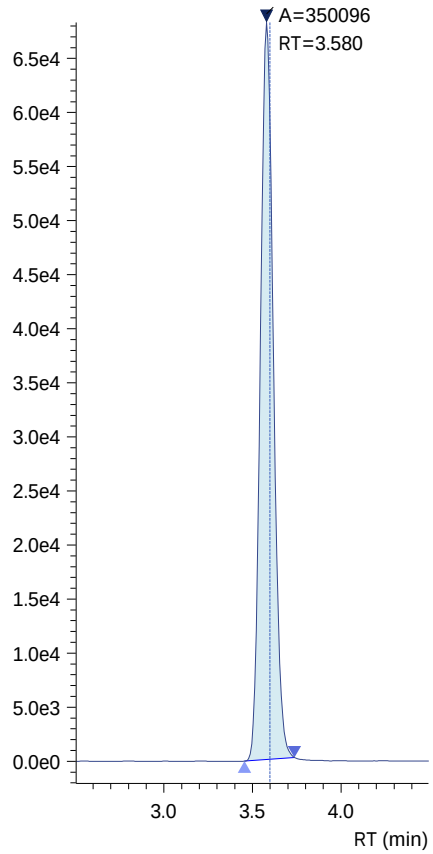
R1 101.00>85.00 (-) 2.20e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.83e4



Insight Report

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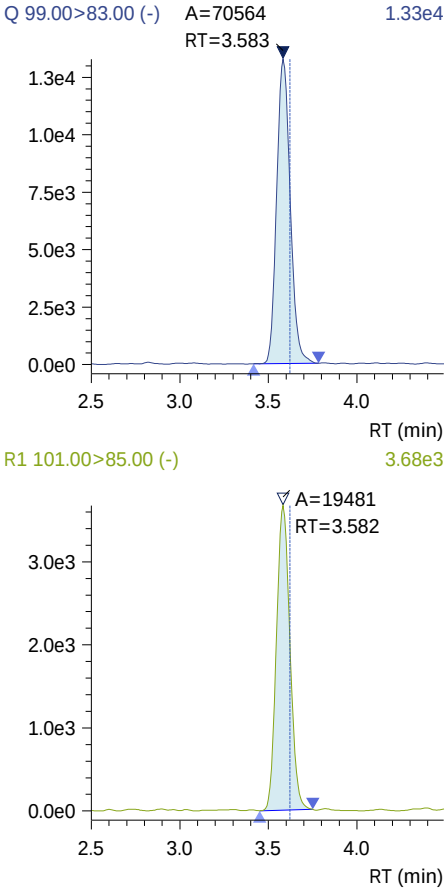
ICS

Sample ID: ICS
Date Acquired: 8/9/2023 10:10:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.583	70564	423644	1.1295	ng/mL	101.00 >85.00	27.61	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	423644	423644	1.0000	ng/mL	----	----	

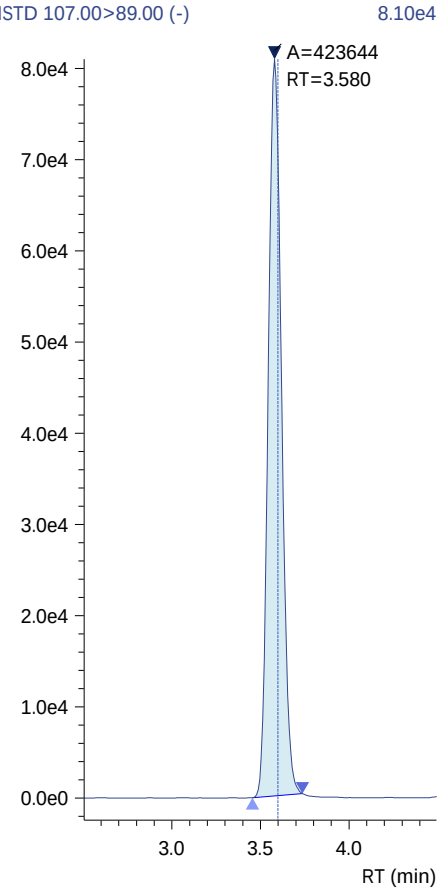
Perchlorate

Conc 1.1295
R#1 27.61 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

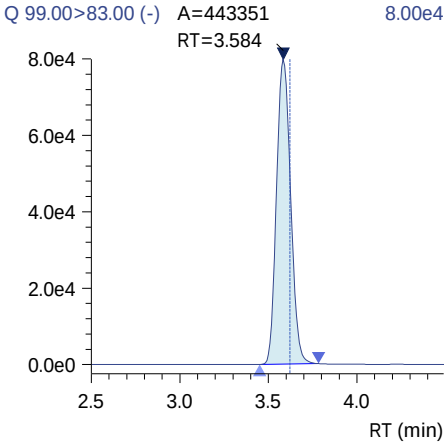
CCV

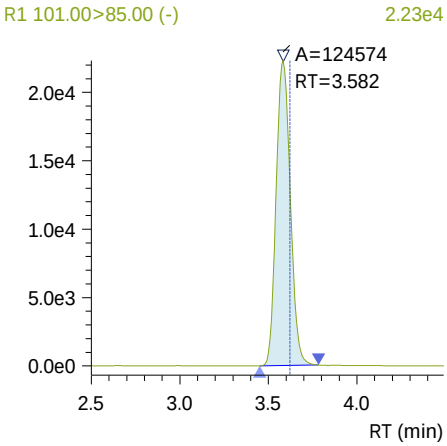
Sample ID: CCV
Date Acquired: 8/9/2023 10:18:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-004.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.584	443351	293010	10.2609	ng/mL	101.00 >85.00	28.10	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.580	293010	293010	1.0000	ng/mL	----	----	

Perchlorate

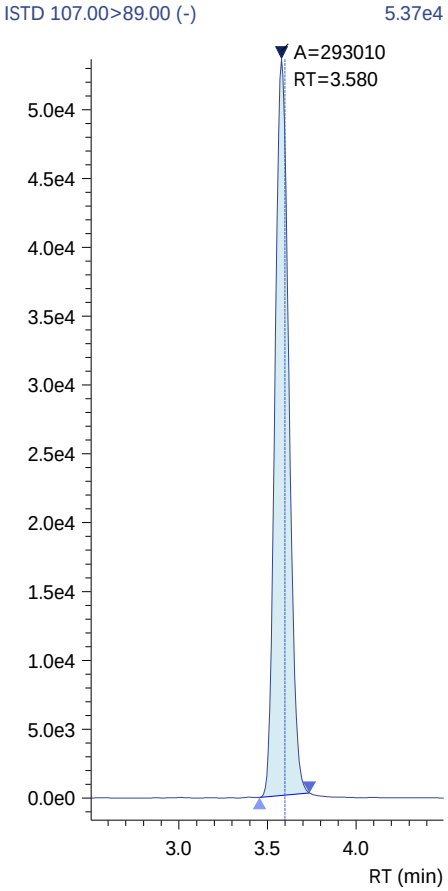
Conc 10.2609
R#1 28.10 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

EQ2300381-01

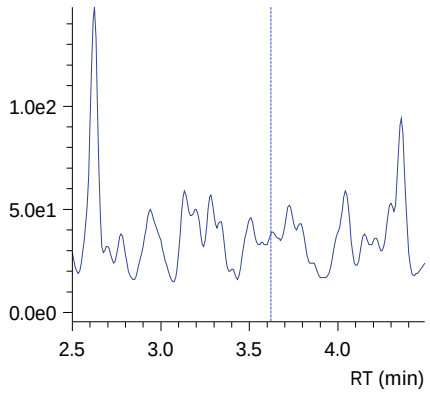
Sample ID: EQ2300381-01
Date Acquired: 8/9/2023 10:23:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-005.lcd
Vial: 25 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	348388	----	ng/mL	101.00 >85.00	0.00	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.579	348388	348388	1.0000	ng/mL	----	----	

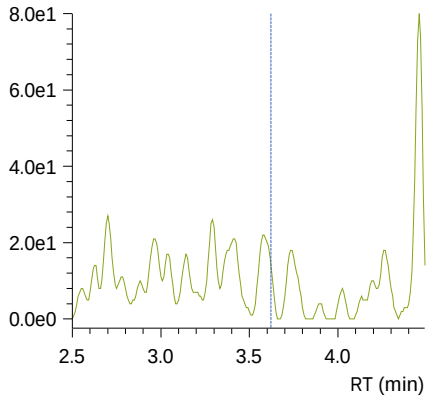
Perchlorate

Conc ----
R#1 0.00 (27.74)

Q 99.00>83.00 (-) 1.48e2



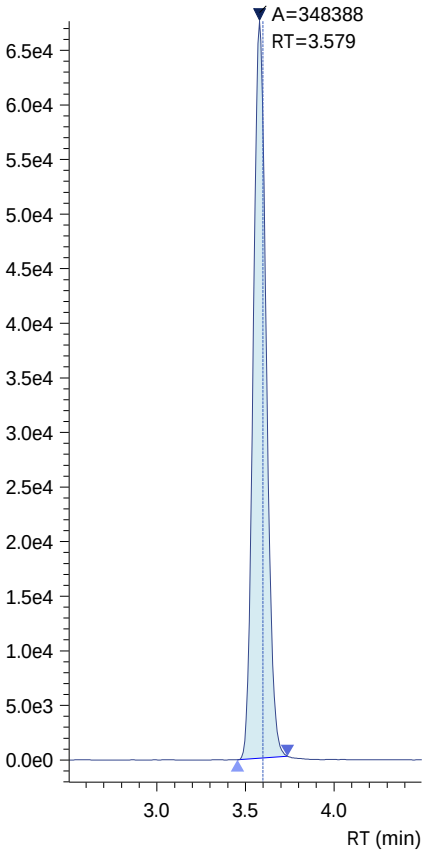
R1 101.00>85.00 (-) 8.00e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.77e4



Insight Report

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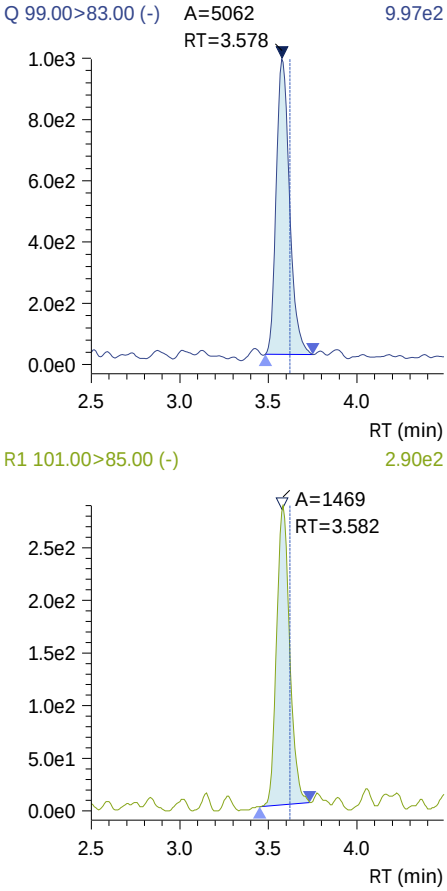
EQ2300381-02

Sample ID: EQ2300381-02
Date Acquired: 8/9/2023 10:29:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-006.lcd
Vial: 26 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	5062	345049	0.0995	ng/mL	101.00 >85.00	29.01	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3450 49	345049	1.0000	ng/mL	----	----	

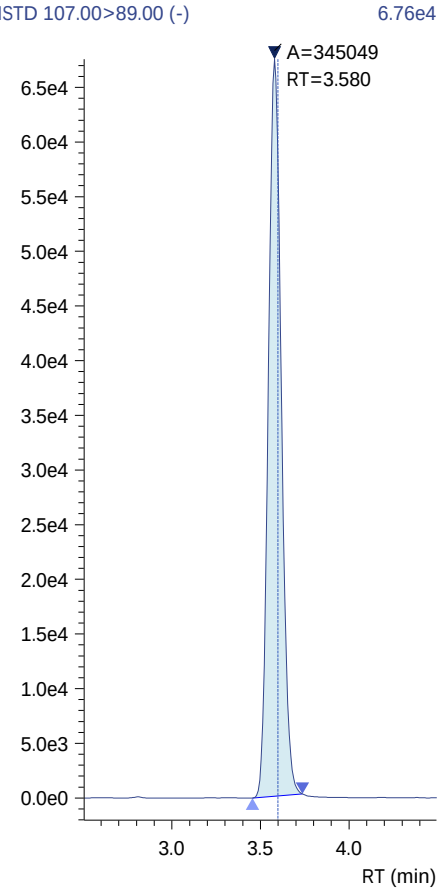
Perchlorate

Conc 0.0995
R#1 29.01 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

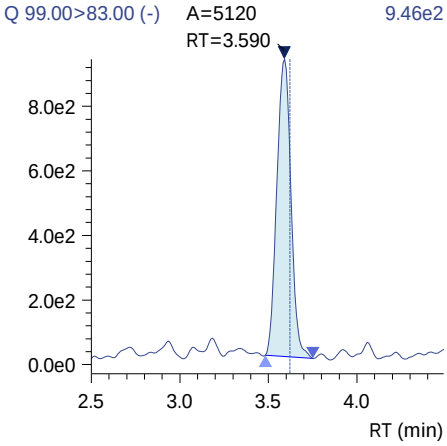
EQ2300381-03

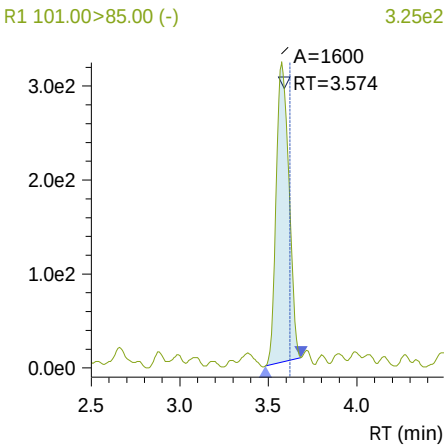
Sample ID: EQ2300381-03
Date Acquired: 8/9/2023 10:34:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-007.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	5120	340635	0.1019	ng/mL	101.00 >85.00	31.26	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3406 35	340635	1.0000	ng/mL	----	----	

Perchlorate

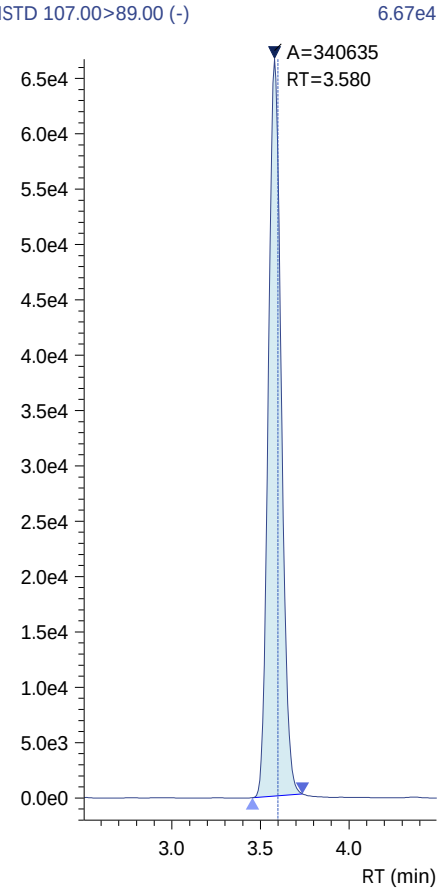
Conc 0.1019
R#1 31.26 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

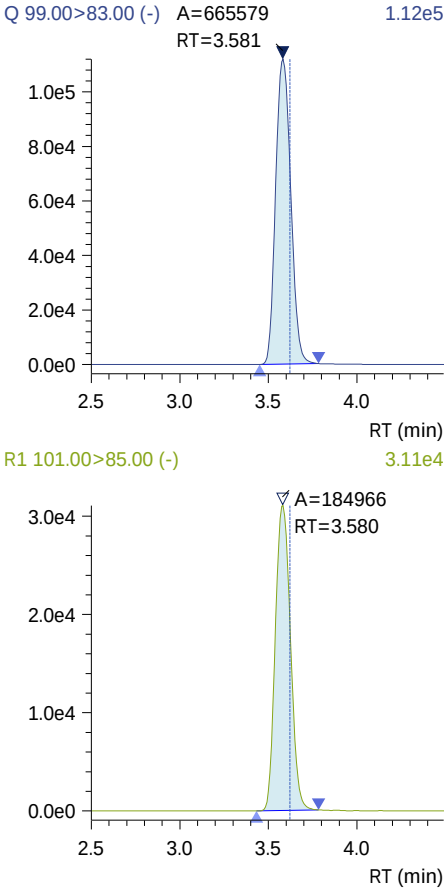
E2300709-001x1k

Sample ID: E2300709-001
Date Acquired: 8/9/2023 11:19:32 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-014.lcd
Vial: 29 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.581	665579	262026	17.2257	ng/mL	101.00 >85.00	27.79	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.577	262026	262026	1.0000	ng/mL	----	----	

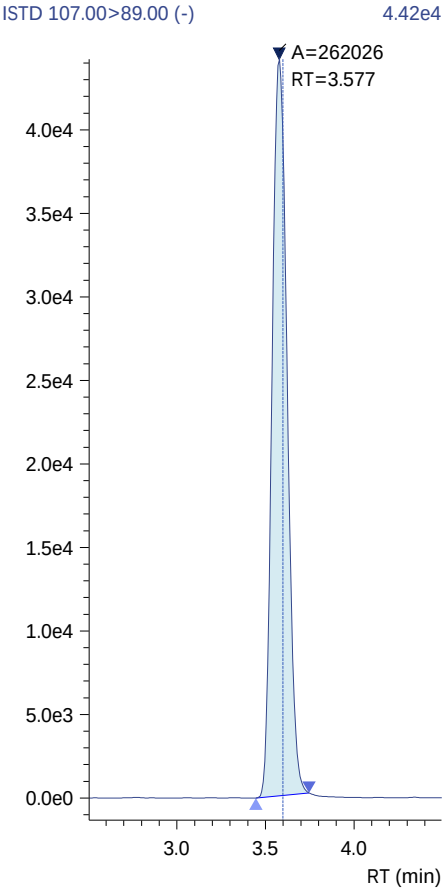
Perchlorate

Conc 17.2257
R#1 27.79 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

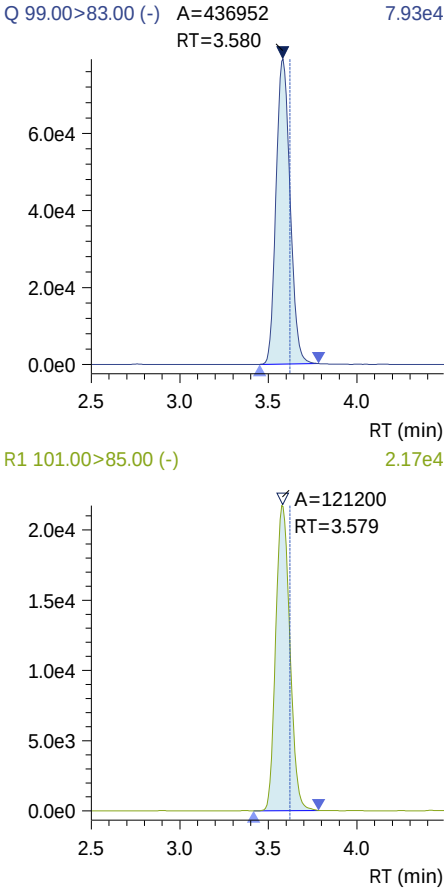
CCV

Sample ID: CCV
Date Acquired: 8/9/2023 11:25:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-015.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	436952	289217	10.2454	ng/mL	101.00 >85.00	27.74	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.577	289217	289217	1.0000	ng/mL	----	----	

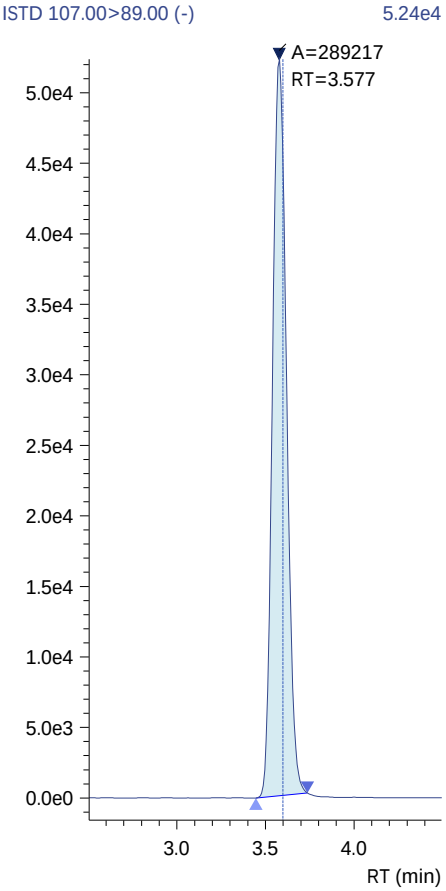
Perchlorate

Conc 10.2454
R#1 27.74 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23080556 Longhorn GW Treatment Plant
Weekly Samples Cover Page

ALS WO# HS23080556

ALS Environmental
ALS Group USA, Corp
10450 Stancliff Road, Suite 210
Houston, TX 77099
T : +1 281 530 5656
F : +1 281 530 5887
www.alsglobal.com

Table of Contents

HS23080556 Longhorn GW Treatment Plant Weekly Samples Cover Page
- CoverPage
- HS23080556 Longhorn GW Treatment Plant Weekly Samples Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - LH18/24-SP650_080823
  - LH18/24-SP650_080823_Between IX
  - LH18/24-SP650_080823_AIX
  - LH18/24-SP650_080823_BIX
  - Dates Report
  - QC
  - Acronyms
  - Certifications
  - SampleReceiptCheckList
  - COC
  - HS23080556-E2300718 Perchlorate Final Report II
- HS23080556 Wetchem NIT-AMM_W- E350.3 - ISE
- HS23080556 Wetchem P-ORTHO
- HS23080556 Wetchem TOC_W
- HS23080556-E2300718 Perchlorate Final Report IV
  - CoverLetter

Table of Contents (continued)

Certificate of Analysis
Chain of Custody
Preparation Sheets
Analytical Results
Accuracy and Precision
Initial Calibration
Chromatograms and Selected Ion Monitoring

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
alsglobal.com

WorkOrder: HS23080556

Longhorn GW Treatment Plant Weekly Samples

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

15-Aug-2023

HS23080556 Longhorn GW Treatment Plant Weekly Samples Final

ALS WO# HS23080556

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

August 14, 2023

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS23080556**

Laboratory Results for: **Longhorn GW Treatment Plant Weekly Samples**

Dear Marcia Olive,

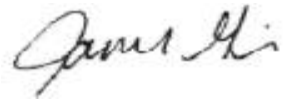
ALS Environmental received 4 sample(s) on Aug 09, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,



Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
Work Order: HS23080556

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23080556-01	LH18/24-SP650_080823	Water		08-Aug-2023 13:00	09-Aug-2023 09:35	☐
HS23080556-02	LH18/24-SP650_080823_Between IX	Water		08-Aug-2023 13:00	09-Aug-2023 09:35	☐
HS23080556-03	LH18/24-SP650_080823_AIX	Water		08-Aug-2023 13:00	09-Aug-2023 09:35	☐
HS23080556-04	LH18/24-SP650_080823_BIX	Water		08-Aug-2023 13:00	09-Aug-2023 09:35	☐

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: Longhorn GW Treatment Plant Weekly Samples
Work Order: HS23080556

Work Order Comments

• The analysis for Perchlorate was subcontracted to ALS Houston High-Res Lab. Final report attached

Work Order Comments

• The analysis for Perchlorate was subcontracted to ALS Houston High-Res Lab. Final report attached

WetChemistry by Method E350.3

Batch ID: R443785

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E415.1

Batch ID: R443723

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

WetChemistry by Method E365.3

Batch ID: R443549

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US

Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.

ANALYTICAL REPORT

Project: Longhorn GW Treatment Plant Weekly Samples

WorkOrder:HS23080556

Sample ID: LH18/24-SP650_080823

Lab ID:HS23080556-01

Collection Date: 08-Aug-2023 13:00

Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
AMMONIA AS N BY E350.3(ISE)		**Method:E350.3**						Analyst: AB
Nitrogen, Ammonia (As N)	**1,800**	a	**5.0**	**10**	**10**	**mg/L**	50	11-Aug-2023 13:54
ORTHO PHOSPHATE (PO4) AS P BY E365.3-1978		**Method:E365.3**						Analyst: AB
Phosphorus, Total Orthophosphate (As P)	**6.35**	a	**0.500**	**1.25**	**1.25**	**mg/L**	50	09-Aug-2023 12:17
TOTAL ORGANIC CARBON BY E415.1		**Method:E415.1**						Analyst: DW
Organic Carbon, Total	**31.4**	a	**5.00**	**10.0**	**10.0**	**mg/L**	10	10-Aug-2023 16:46

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
ANALYTICAL REPORT
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder:HS23080556
Sample ID: LH18/24-SP650_080823_Between IX
Lab ID:HS23080556-02
Collection Date: 08-Aug-2023 13:00
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: KR
Subcontract Analysis	See Attached		0	0		NA	1	10-Aug-2023 13:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
ANALYTICAL REPORT
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder:HS23080556
Sample ID: LH18/24-SP650_080823_AIX
Lab ID:HS23080556-03
Collection Date: 08-Aug-2023 13:00
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: KR
Subcontract Analysis	See Attached		0	0		NA	1	10-Aug-2023 13:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 14-Aug-23

ANALYTICAL REPORT

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
Sample ID: LH18/24-SP650_080823_BIX
Collection Date: 08-Aug-2023 13:00

WorkOrder:HS23080556
Lab ID:HS23080556-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: KR
Subcontract Analysis	See Attached		0	0		NA	1	10-Aug-2023 13:14

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080556

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R443549 (0)	**Test Name :** ORTHO PHOSPHATE (PO4) AS P BY E365.3-1978				**Matrix:** Water	
HS23080556-01	LH18/24-SP650_080823	08 Aug 2023 13:00			09 Aug 2023 12:17	50
Batch ID: R443672 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS23080556-02	LH18/24-SP650_080823_Between IX	08 Aug 2023 13:00			10 Aug 2023 13:14	1
HS23080556-03	LH18/24-SP650_080823_AIX	08 Aug 2023 13:00			10 Aug 2023 13:14	1
HS23080556-04	LH18/24-SP650_080823_BIX	08 Aug 2023 13:00			10 Aug 2023 13:14	1
Batch ID: R443723 (0)	**Test Name :** TOTAL ORGANIC CARBON BY E415.1				**Matrix:** Water	
HS23080556-01	LH18/24-SP650_080823	08 Aug 2023 13:00			10 Aug 2023 16:46	10
Batch ID: R443785 (0)	**Test Name :** AMMONIA AS N BY E350.3(ISE)				**Matrix:** Water	
HS23080556-01	LH18/24-SP650_080823	08 Aug 2023 13:00			11 Aug 2023 13:54	50

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080556

QC BATCH REPORT

Batch ID: R443549 (0) **Instrument:** UV-2450 **Method:** ORTHO PHOSPHATE (PO4) AS P BY E365.3-1978

MBLK Sample ID: **MBLK-R443549** Units: **mg/L** Analysis Date: **09-Aug-2023 12:17**
Client ID: Run ID: **UV-2450_443549** SeqNo: **7480701** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	0.0250	0.0250								U

LCS Sample ID: **LCS-R443549** Units: **mg/L** Analysis Date: **09-Aug-2023 12:17**
Client ID: Run ID: **UV-2450_443549** SeqNo: **7480700** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	0.279	0.0250	0.25	0	112	85 - 115				

MS Sample ID: **HS23080556-01MS** Units: **mg/L** Analysis Date: **09-Aug-2023 12:17**
Client ID: **LH18/24-SP650_080823** Run ID: **UV-2450_443549** SeqNo: **7481473** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	18.95	1.25	12.5	6.35	101	80 - 120				

MSD Sample ID: **HS23080556-01MSD** Units: **mg/L** Analysis Date: **09-Aug-2023 12:17**
Client ID: **LH18/24-SP650_080823** Run ID: **UV-2450_443549** SeqNo: **7481472** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total Orthophosphate (As P)	19.3	1.25	12.5	6.35	104	80 - 120	18.95	1.83	20	

The following samples were analyzed in this batch: HS23080556-01

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080556

QC BATCH REPORT

Batch ID: R443723 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON BY E415.1

MBLK Sample ID: **MBLK-08092023** Units: **mg/L** Analysis Date: **10-Aug-2023 15:13**
Client ID: Run ID: **TOC_05_443723** SeqNo: **7484992** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS-08102023** Units: **mg/L** Analysis Date: **10-Aug-2023 15:29**
Client ID: Run ID: **TOC_05_443723** SeqNo: **7484993** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.65	1.00	10	0	96.5	85 - 115				

LCSD Sample ID: **LCSD-08102023** Units: **mg/L** Analysis Date: **10-Aug-2023 15:45**
Client ID: Run ID: **TOC_05_443723** SeqNo: **7484994** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.06	1.00	10	0	101	85 - 115	9.65	4.16	20	

MS Sample ID: **HS23080556-01MS** Units: **mg/L** Analysis Date: **10-Aug-2023 17:03**
Client ID: **LH18/24-SP650_080823** Run ID: **TOC_05_443723** SeqNo: **7484996** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	127.9	10.0	100	31.42	96.5	80 - 120				

The following samples were analyzed in this batch: HS23080556-01

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: HS23080556

QC BATCH REPORT

Batch ID: R443785 (0) **Instrument: WetChem_HS** **Method: AMMONIA AS N BY E350.3(ISE)**

MBLK Sample ID: **MBLK-R443785** Units: **mg/L** Analysis Date: **11-Aug-2023 13:54**
Client ID: Run ID: **WetChem_HS_443785** SeqNo: **7486094** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	0.20	0.20								U

LCS Sample ID: **LCS-R443785** Units: **mg/L** Analysis Date: **11-Aug-2023 13:54**
Client ID: Run ID: **WetChem_HS_443785** SeqNo: **7486093** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	9.106	0.20	10	0	91.1	80 - 120				

MS Sample ID: **HS23080308-01MS** Units: **mg/L** Analysis Date: **11-Aug-2023 13:54**
Client ID: Run ID: **WetChem_HS_443785** SeqNo: **7486096** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	18.17	0.20	10	7.775	104	80 - 120				

MSD Sample ID: **HS23080308-01MSD** Units: **mg/L** Analysis Date: **11-Aug-2023 13:54**
Client ID: Run ID: **WetChem_HS_443785** SeqNo: **7486095** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Ammonia (As N)	18.24	0.20	10	7.775	105	80 - 120	18.17	0.412	20	

The following samples were analyzed in this batch: HS23080556-01

ALS Houston, US Date: 14-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Weekly Samples
WorkOrder: **HS23080556**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087-2023	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 14-Aug-23

Sample Receipt Checklist

Work Order ID: HS23080556 **Date/Time Received:** 09-Aug-2023 09:35

Client Name: Bhate Environmental **Received by:** Corey Grandits

Completed By:	/S/ Paresh M. Giga	09-Aug-2023 11:03	**Reviewed by:**	/S/ James Guin	09-Aug-2023 17:10
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:none
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.2C/1.1C U/C	IR31
Cooler(s)/Kit(s):	48983	
Date/Time sample(s) sent to storage:	8/9/23 11:10	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 530-5656 ATTN: Dane Wacasey

Project: BHATE
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. JVPCIBH.0001

Job:
GROUNDWATER TREATMENT PLANT WEEKLY SAMPLES

Prepared By: Scott Beesinger

P.O. Number

HS23080556

Bhate Environmental Associates, Inc.
Longhorn GW Treatment Plant Weekly Samples

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	Analyses: AMMONIA-N	TOTAL ORGANIC CARBON	ORTHO-PHOSPHATE	PERCHLORATE						Remarks (Preservatives, etc.)	Lab I.D.#
LH18/24-SP650_080823	Water	08/08/23 / 13:00		3	X	X								H2SO4	
LH18/24-SP650_080823	Water	08/08/23 / 13:00		1			X							NONE	
LH18/24–SP650_080823_Between IX	Water	08/08/23 / 13:00		1				X						NONE	
LH18/24-SP650_080823_AIX	Water	08/08/23 / 13:00		1				X						NONE	
LH18/24-Sp650_080823_BIX	Water	08/08/23 / 13:00		1				X							

Additional Remarks: **24 HR. TAT on Perchlorate Samples. Standard TAT on all other parameters**

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	08/08/23	13:30		8.9.23	0815						

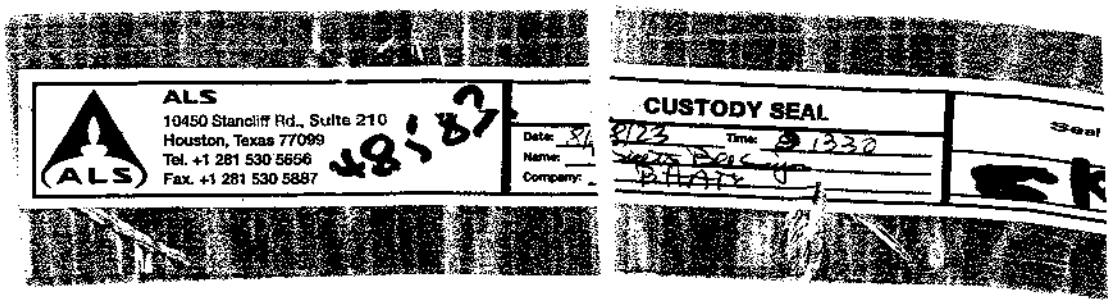
For Lab Use Only

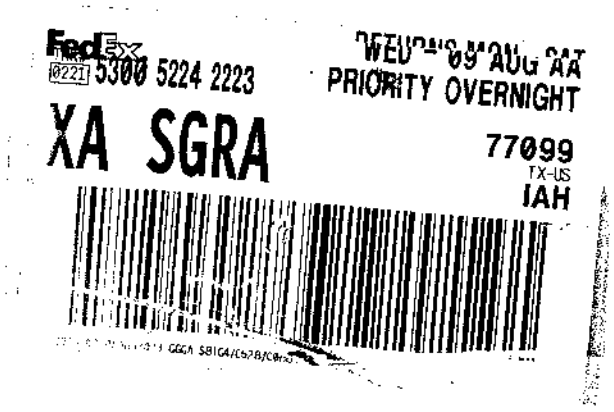
Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

48583 1.2°

(Word) S:\Forms\Chain of Custody - BiWeekly


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
CUSTODY SEAL
Seal


FedEx
0221
5300 5224 2223
PRIORITY OVERNIGHT
XA SGRA
77099
TX-US
IAH

August 09, 2023 Service Request No:E2300718

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080556

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 09, 2023
For your reference, these analyses have been assigned our service request number **E2300718.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300718
Project:	HS23080556	**Date Received:**	08/09/23
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt.

Three samples were received for analysis at ALS Environmental in Houston on 08/09/23.

The samples were received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300381: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300718
Project: HS23080556

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300718-001	LH18/24-SP650_080823_Between IX	8/8/2023	1300
E2300718-002	LH18/24-SP650_080823_AIX	8/8/2023	1300
E2300718-003	LH18/24-SP650_080823_BIX	8/8/2023	1300

Service Request Summary

Folder #: **E2300718**
Client Name: ALS Environmental - US
Project Name: HS23080556
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/09/23
Internal Due Date: 8/10/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080556
EDD: No EDD Specified

3 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300718-001	LH18/24-SP650_080823_Between IX	Water	08/08/23 1300	**IV**
E2300718-002	LH18/24-SP650_080823_AIX	Water	08/08/23 1300	**IV**
E2300718-003	LH18/24-SP650_080823_BIX	Water	08/08/23 1300	**IV**

Service Request Summary

Folder #: **E2300718**
Client Name: ALS Environmental - US
Project Name: HS23080556
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/09/23
Internal Due Date: 8/10/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080556
EDD: No EDD Specified

3 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

RUSH

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22647

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080556
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080556-02**	**LH18/24-SP650_080823_Between IX**	**Water**	**08 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			10 Aug 2023
2.	**HS23080556-03**	**LH18/24-SP650_080823_AIX**	**Water**	**08 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			10 Aug 2023
3.	**HS23080556-04**	**LH18/24-SP650_080823_BIX**	**Water**	**08 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			10 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
RUSH 24Hr.TAT

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 8.9.23 1123

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist: JG

Client/Project: ALS

Thermometer ID: IR31

Date/Time Received: 8-9-23 Initials: cy

Date/Time Logged in: 8-9-23 Initials: cy

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ● Courier (ALS) ○ Client

2. Samples received in: ● Cooler ○ Box ○ Envelope ○ Other

3. Were custody seals on coolers? ○ Yes ● No
   Were they intact? ○ Yes ○ No ● N/A
   Were they signed and dated? ○ Yes ○ No ● N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ● Baggies ○ Bubble Wrap ○ Gel Packs ● Wet Ice ○ Sleeves ○ Other

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-9-23	1125	cy	7.2	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ● Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ● Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ● Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ● Yes ○ No
10. Did sample labels and tags agree with custody documents? ● Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300708-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2300709-001	LH18/24-SP140_080123	.01	6850/ClO4 DOD			Water	10mL	
3	E2300711-001	04WW09_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300711-002	04WW10_080123	.02	6850/ClO4 DOD			Ground Water	10mL	
5	E2300711-003	04WW05_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300711-004	04WW11_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300711-005	04WW07_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300711-006	04WW07_080123_a	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300711-007	04WW04_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300711-008	04WW01_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300716-001	1824DPTMW07_080223	.01	6850/ClO4 DOD			Water	10mL	
12	E2300718-001	LH18/24-SP650_080823_Between IX	.01	6850/ClO4 DOD			Water	10mL	
13	E2300718-002	LH18/24-SP650_080823_AIX	.01	6850/ClO4 DOD			Water	10mL	
14	E2300718-003	LH18/24-SP650_080823_BIX	.01	6850/ClO4 DOD			Water	10mL	
15	EQ2300381-01	MB		6850/ClO4			Liquid	10mL	
16	EQ2300381-02	LCS		6850/ClO4			Liquid	10mL	
17	EQ2300381-03	DLCS		6850/ClO4			Liquid	10mL	
18	EQ2300381-04	04WW10_080123 MS	.02	6850/ClO4 DOD			Liquid	10mL	
19	EQ2300381-05	04WW10_080123 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
20	K2308781-001	LGAC-INF-080723	.01	6850/ClO4			Water	10mL	
21	K2308781-002	LGAC-INT1-080723	.01	6850/ClO4			Water	10mL	
22	K2308781-003	LGAC-INT2-080723	.01	6850/ClO4			Water	10mL	
23	R2306562-017	2307210621 PFE-1	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300381-02	1.00µL	EQ2300381-02	1.00µL	EQ2300381-03	1.00µL	EQ2300381-03	1.00µL	EQ2300381-04	1.00µL	EQ2300381-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300708-001	100.00µL	E2300709-001	100.00µL	E2300711-001	100.00µL	E2300711-002	100.00µL	E2300711-003	100.00µL	E2300711-004	100.00µL
E2300711-005	100.00µL	E2300711-006	100.00µL	E2300711-007	100.00µL	E2300711-008	100.00µL	E2300716-001	100.00µL	E2300718-001	100.00µL
E2300718-002	100.00µL	E2300718-003	100.00µL	EQ2300381-01	100.00µL	EQ2300381-01	100.00µL	EQ2300381-02	100.00µL	EQ2300381-02	100.00µL
EQ2300381-03	100.00µL	EQ2300381-03	100.00µL	EQ2300381-04	100.00µL	EQ2300381-05	100.00µL	K2308781-001	100.00µL	K2308781-002	100.00µL
K2308781-003	100.00µL	R2306562-017	100.00µL								

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/9/23 09:01
Finished: 8/9/23 09:53
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	8/ 8/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 9/23
Sample Name:	LH18/24-SP650_080823_Between IX	**Units:**	µg/L
Lab Code:	E2300718-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.639**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 13:06	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	8/ 8/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 9/23
Sample Name:	LH18/24-SP650_080823_AIX	**Units:**	µg/L
Lab Code:	E2300718-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.318**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 13:12	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	8/ 8/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 9/23
Sample Name:	LH18/24-SP650_080823_BIX	**Units:**	µg/L
Lab Code:	E2300718-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**157**		1.00	0.500	0.250	10	8/ 9/23	8/9/23 13:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300381-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:23	424245	813305	

Accuracy & Precision

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556
Sample Matrix: Water

Service Request: E2300718
Date Analyzed: 8/ 9/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424245

	Lab Control Sample EQ2300381-02			Duplicate Lab Control Sample EQ2300381-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.102	0.100	102	84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:34	424245	813305	

HS23080556 Wetchem NIT-AMM_W- E350.3 - ISE

ALS WO# HS23080556

NH3_AMM_N_ISE, NH3_AMM_N_E350.3_ISE

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

Logbook **32303**

Ion Selective Electrode Logbook

Analyst: NB					Date: 05/11/23		
Method: SM4500NH3-D/EPA 350.3 or SM4500 NH3 B-F							
Probe Calibration Date: 05/11/23		Cal Std ID: 322144601-C			Probe ID: NH3-5		
Std Level		mV	Conc., mg/L:		Sodium Thiosulfate ID: 3220642219		
STD 1 (mg/L):		0.203	122.8		Std Level	mV	Conc., mg/L:
STD 2 (mg/L):		1.008	93.9		STD 4 (mg/L):	403	10009
STD 3 (mg/L):		5.003	55.8		STD 5 (mg/L):	-5.4	50003
LSC / MS Spike ID: 322144602					ICAL Date & Slope:	92.3 % 58.6	
ICV Cal STD ID: 322107509							
DPD Reagent ID: 322607503							

WO # / SX #	Bottle #	Initial g or ml	Final Vol. ml	Dilution Factor	Initial Conc. mg/L	Final Conc. mg/L	Chlorine Check (+/–)	Comments
ICV		50 mL	50mL		9.257			
ICB					0.005			
MBLK					0.005			
LCS					9.106			
HS230803O8-01					7.775			
308-01 MS					18.166			
308-01 MSD					~~11.241~~	18.241		NB 05/11/23
663-01					1869			
663-02					0.505			
316-01					0.603			
559-01				2x	27.900			
207-01					4.769			
CCV					9.132			
CCB					0.009			
207-02					2.766			
207-03					1.655			
207-04				5x	10.545			
207-05					3.715			
207-06					1.169			
207-07					0.791			
483-01					3.600			
661-01				10x	9.969			
310-01					4.525			
CCV 2					9.326			
CCB2		↓			0.008			

Batch ID: ~~447~~ 443784, 443785 | Reported By: NB | Reviewed By:

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES

NRT_AMM_N ISE 3603
NRT_AMM_N ISE

Logbook **32303**

Ion Selective Electrode Logbook

Analyst:				Date:	
Method: SM4500NH3-D/EPA 350.3 or SM4500 NH3 B-F					
Probe Calibration Date:		Cal Std ID: con. page 75		Probe ID:	
Std Level		mV	Conc., mg/L:	Sodium Thiosulfate ID:	
STD 1 (mg/L):				Std Level	mV / Conc., mg/L:
STD 2 (mg/L):				STD 4 (mg/L):	
STD 3 (mg/L):				STD 5 (mg/L):	
LSC / MS Spike ID:				ICAL Date & Slope:	
ICV Cal STD ID:					
DPD Reagent ID:					

WO # / SX #	Bottle #	Initial g or ml	Final Vol. ml	Dilution Factor	Initial Conc. mg/L	Final Conc. mg/L	Chlorine Check (+/–)	Comments
HS2308031I-01		50mL	50mL		3.809			
311-02				50x	15.872			
311-03				100x	7.471			
311-04					3.780			
311-05				100x	11.099			
HS2308056-01				50x	35.961			
129-01					49.627			
244-01					45.707			
341-01				2x	35.545			
437-01				10x	21.342			
CCV 3					9.333			
CCB 3					0.009			
520-01				5x	17.647			
597-01					42.713			
638-01					11.052			
638-02					7.849			
638-03				100x	22.862			
638-04					~~12.230~~	11.230		AS 05/11/23
638-05					9.909			
CCV 4					9.277			
CCB 4					0.009			
			AS 05/11/23					

Batch ID:	Reported By	Reviewed By:

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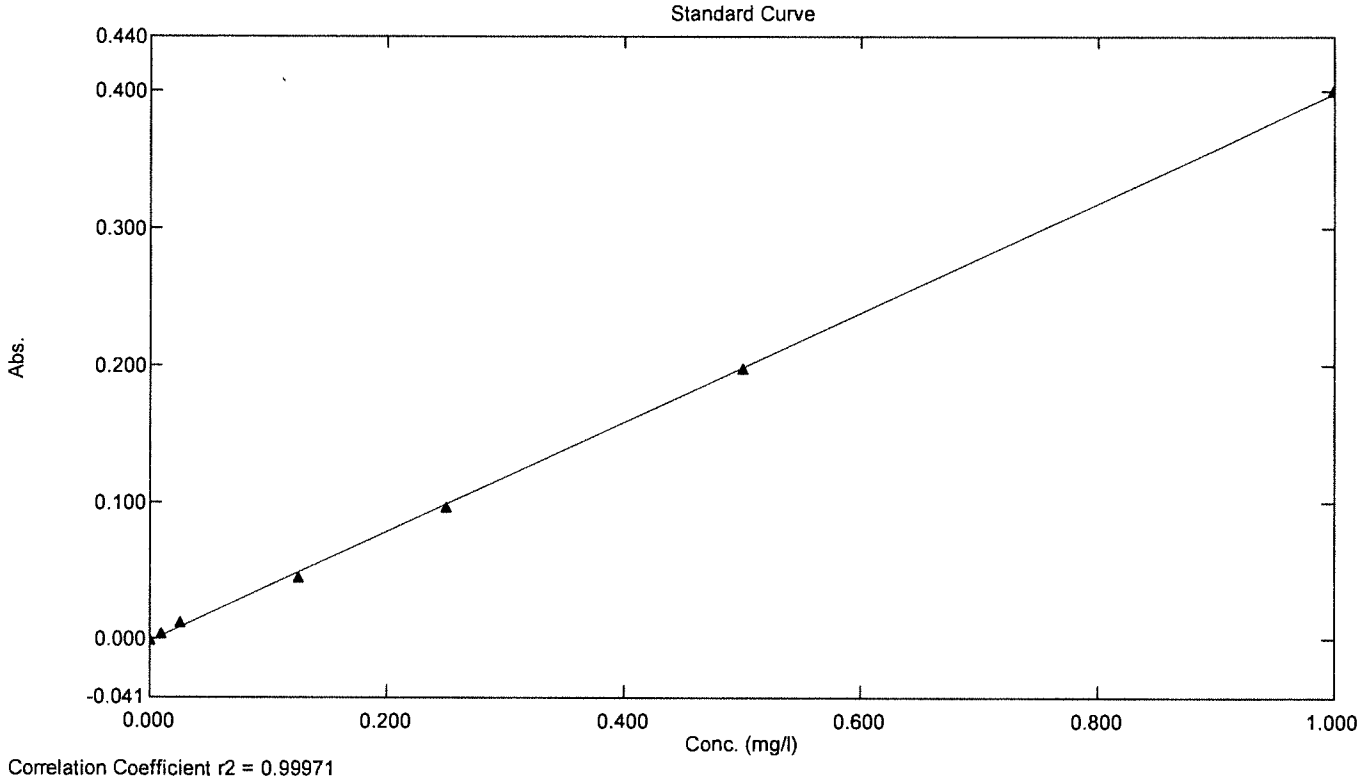
HS23080556 Wetchem P-ORTHO

ALS WO# HS23080556

Standard Table Report

08/14/2023 05:47:39 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\P_ORTHO (365.3 METHOD)\2023\08092023_P_ORTHO_W.pho



Correlation Coefficient r2 = 0.99971

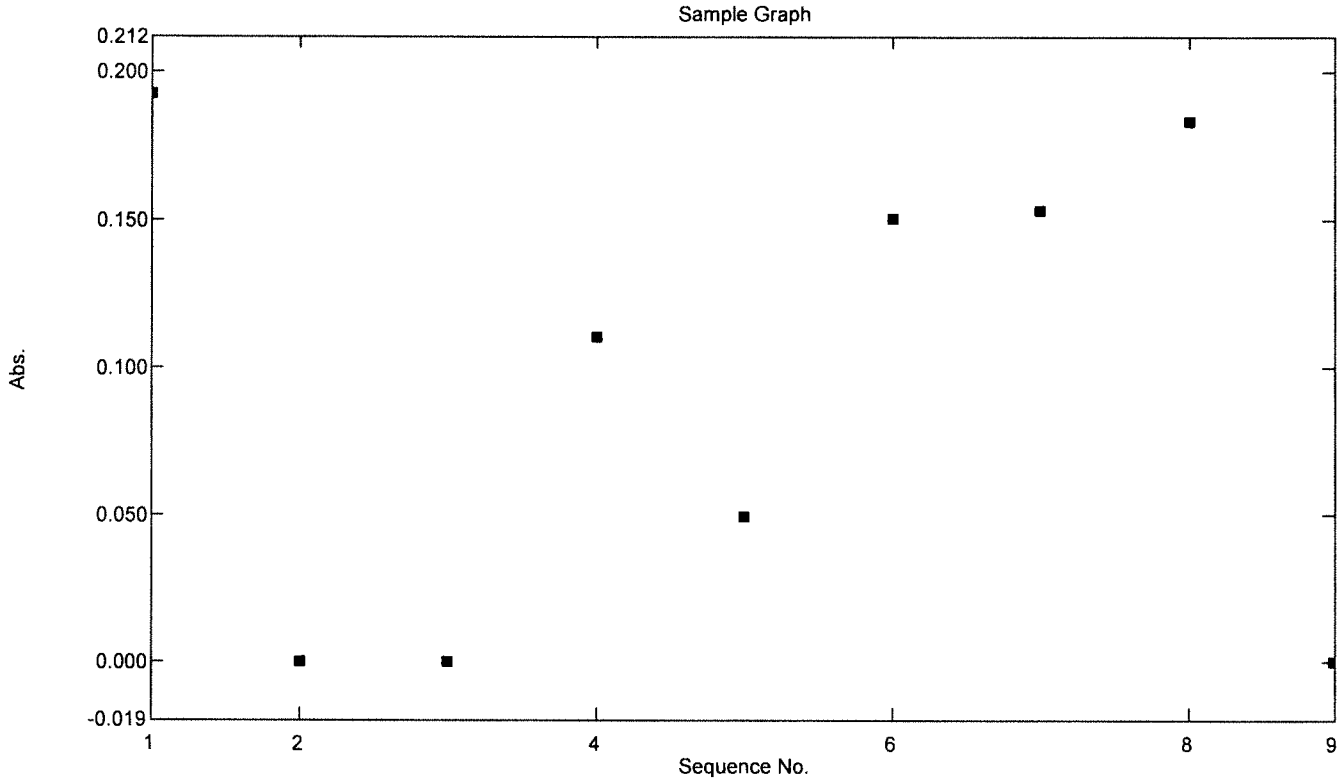
Standard Table

	Sample ID	Type	Ex	Conc	WL650.0	Wgt.Factor	Comments
1	STD1	Standard		0.000	-0.000	1.000	
2	STD2	Standard		0.010	0.005	1.000	
3	STD3	Standard		0.025	0.012	1.000	
4	STD4	Standard		0.125	0.045	1.000	
5	STD5	Standard		0.250	0.096	1.000	
6	STD6	Standard		0.500	0.197	1.000	
7	STD7	Standard		1.000	0.400	1.000	
8							

Sample Table Report

08/14/2023 05:47:41 PM

File Name: C:\Program Files (x86)\Shimadzu\UVProbe\Data\P_ORTHO (365.3 METHOD)\2023\08092023_P_ORTHO_W.pho



Sample Table

	Sample ID	Date	Time	Conc	WL650.	Comments
1	CCV	08/09/2023	11:59:45 AM	0.486	0.193	322143009 WC-24
2	CCB	08/09/2023	11:59:57 AM	0.004	0.000	
3	MBLK	08/09/2023	12:00:03 PM	0.004	0.000	
4	LCS	08/09/2023	12:00:39 PM	0.279	0.110	322143008 WC-23
5	HS23080556.01	08/09/2023	03:47:22 PM	0.127	0.050	11N 3100606911 DF=50X
6	HS23080556.01MS	08/09/2023	03:48:13 PM	0.379	0.150	DF=50X
7	HS23080556.01MSD	08/09/2023	03:48:29 PM	0.386	0.153	DF=50X
8	CCV2	08/09/2023	03:49:13 PM	0.462	0.183	A.MOLYBDATE 322143903
9	CCB2	08/09/2023	03:49:48 PM	0.003	-0.000	A.ACID 322143902
10						

HS23080556 Wetchem TOC_W

ALS WO# HS23080556

C:\TOC-L\Data\2023_06_21_002.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Standard	NPOC	CALIBRATION		06_21_2023	1.000		
2	Unknown	NPOC	ICV		06_21_2023	1.000	NPOC:7.789mg/L	
3	Unknown	NPOC	ICB		06_21_2023	1.000	NPOC:0.1521mg/L	

C:\TOC-L\Data\2023_06_21_002.tlx

	Status	Date / Time	Vial
1	Completed	6/21/2023 6:	50, 51, 52, 5
2	Completed	6/21/2023 7:	57
3	Completed	6/21/2023 7:	58

TOC-Control L Report

2023_06_21_002.tlx

Instr.Information

Instrument Options	TOC/ASI/IC Unit/
Catalyst	Regular Sensitivity

Cal. Curve

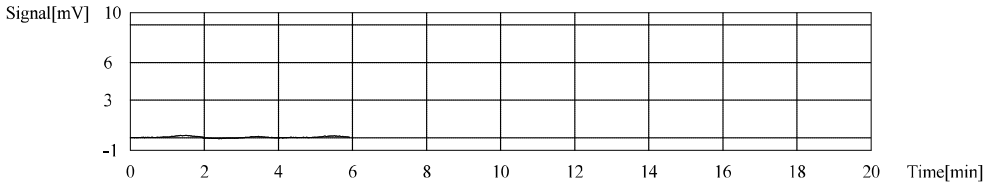
Sample Name:	CALIBRATION
Sample ID:	
Cal. Curve:	06_21_2023B.2023_06_21_17_09_19.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.3456	50uL	1.000	*******		6/21/2023 5:18:00 PM
2	0.2872	50uL	1.000	*******		6/21/2023 5:20:19 PM
3	0.1081	50uL	1.000	*******		6/21/2023 5:22:27 PM

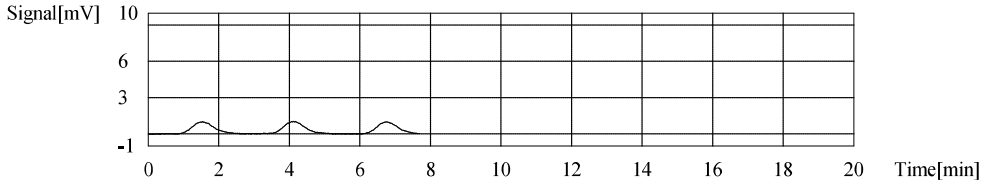
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.2470



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.170	50uL	1.000	*******		6/21/2023 5:31:50 PM
2	4.088	50uL	1.000	*******		6/21/2023 5:34:43 PM
3	3.977	50uL	1.000	*******		6/21/2023 5:37:25 PM

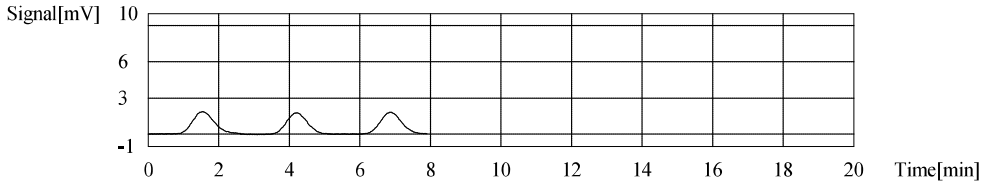
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	4.078



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.677	50uL	1.000	*******		6/21/2023 5:46:50 PM
2	7.596	50uL	1.000	*******		6/21/2023 5:49:44 PM
3	7.710	50uL	1.000	*******		6/21/2023 5:52:35 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	7.661



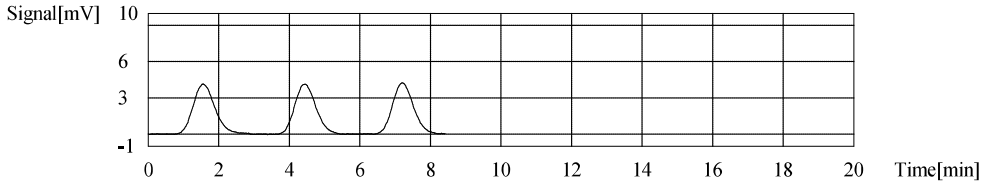
TOC-Control L Report

2023_06_21_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.78	50uL	1.000	*******		6/21/2023 6:02:16 PM
2	17.59	50uL	1.000	*******		6/21/2023 6:05:16 PM
3	17.72	50uL	1.000	*******		6/21/2023 6:08:17 PM

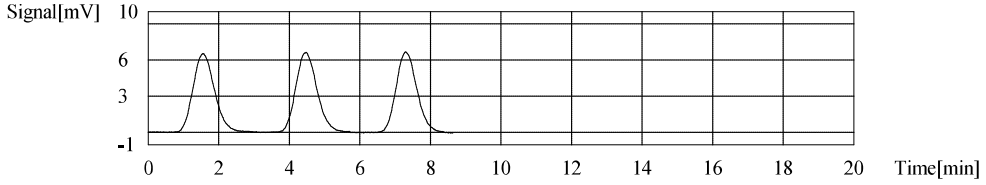
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 17.70



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	27.66	50uL	1.000	*******		6/21/2023 6:18:00 PM
2	27.76	50uL	1.000	*******		6/21/2023 6:21:02 PM
3	27.86	50uL	1.000	*******		6/21/2023 6:24:11 PM

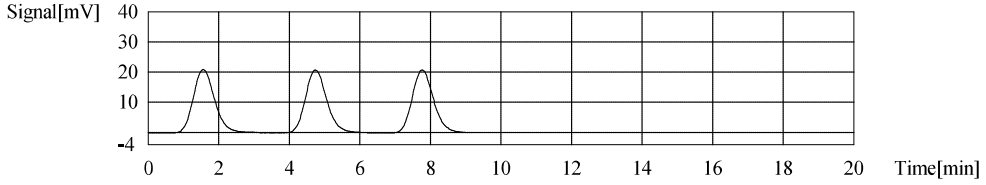
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 27.76



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.98	50uL	1.000	*******		6/21/2023 6:34:09 PM
2	87.22	50uL	1.000	*******		6/21/2023 6:37:26 PM
3	87.78	50uL	1.000	*******		6/21/2023 6:40:41 PM

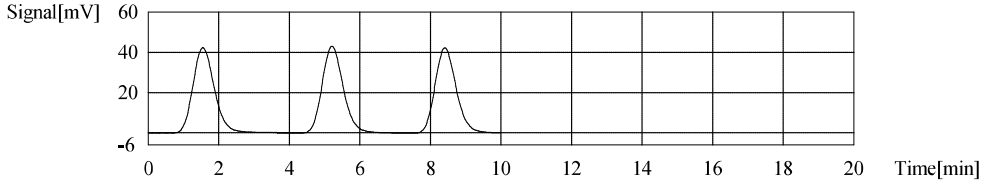
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 87.66



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	179.6	50uL	1.000	*******		6/21/2023 6:51:07 PM
2	180.8	50uL	1.000	*******		6/21/2023 6:54:35 PM
3	177.8	50uL	1.000	*******		6/21/2023 6:57:57 PM

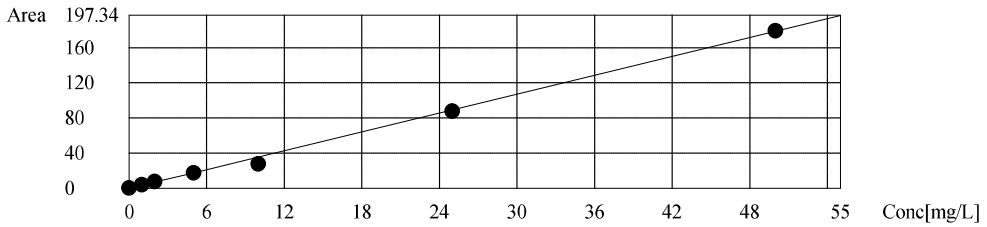
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 179.4



TOC-Control L Report

2023_06_21_002.tlx

Slope:	3.583
Intercept	0.000
r^2	0.9977
r	0.9989
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name: ICV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

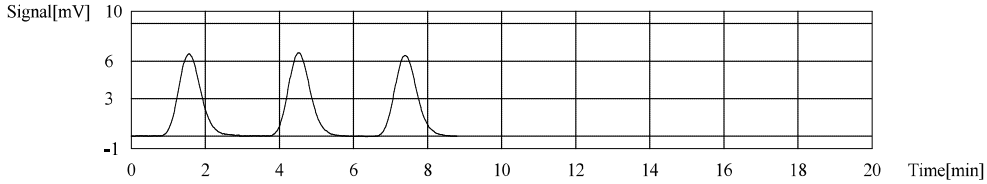
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.789mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.72	7.736mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:07:41 PM
2	28.05	7.829mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:10:48 PM
3	27.95	7.801mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:14:01 PM

Mean Area 27.91
Mean Conc. 7.789mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1521mg/L

1. Det

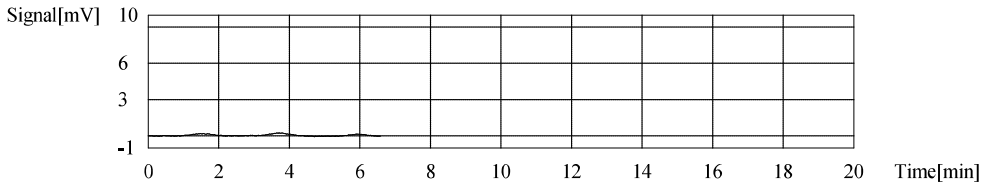
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4802	0.1340mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:23:00 PM
2	0.6284	0.1754mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:25:29 PM
3	0.5263	0.1469mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:27:52 PM

TOC-Control L Report

2023_06_21_002.tlx

Mean Area	0.5450
Mean Conc.	0.1521mg/L



C:\TOC-L\Data\2023_08_10_001.tlx

	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
1	CCV	322144508	06_21_2023	NPOC:25.04mg/L	Completed	8/10/2023 10:14:	1
2	CCB		06_21_2023	NPOC:0.2286mg/L	Completed	8/10/2023 10:27:	2
3	MBLK-08092023		06_21_2023	NPOC:0.04441mg/L	Completed	8/10/2023 10:40:	3
4	LCS-08102023	3100606518	06_21_2023	NPOC:9.629mg/L	Completed	8/10/2023 10:56:	4
5	LCSD-08102023		06_21_2023	NPOC:9.960mg/L	Completed	8/10/2023 11:12:	5
6	HS23080502-01	TOC_W 5310B	06_21_2023	NPOC:0.1889mg/L	Completed	8/10/2023 11:26:	6
7	HS23080502-04		06_21_2023	NPOC:0.05407mg/L	Completed	8/10/2023 11:39:	7
8	HS23080583-01		06_21_2023	NPOC:14.89mg/L	Completed	8/10/2023 11:56:	8
9	HS23080615-01		06_21_2023	NPOC:3.838mg/L	Completed	8/10/2023 12:11:	9
10	HS23080615-01MS		06_21_2023	NPOC:13.83mg/L	Completed	8/10/2023 12:27:	10
11	HS23080615-02		06_21_2023	NPOC:0.5319mg/L	Completed	8/10/2023 12:42:	11
12	HS23080615-03		06_21_2023	NPOC:20.38mg/L	Completed	8/10/2023 12:58:	12
13	CCV	322144508	06_21_2023	NPOC:25.44mg/L	Completed	8/10/2023 1:15:5	1
14	CCB		06_21_2023	NPOC:0.1459mg/L	Completed	8/10/2023 1:29:1	2
15	HS23080615-04		06_21_2023	NPOC:8.890mg/L	Completed	8/10/2023 1:45:0	13
16	HS23080616-01		06_21_2023	NPOC:0.6777mg/L	Completed	8/10/2023 1:59:3	14
17	HS23080616-02		06_21_2023	NPOC:2.398mg/L	Completed	8/10/2023 2:14:4	15
18	HS23080616-03		06_21_2023	NPOC:1.374mg/L	Completed	8/10/2023 2:29:3	16
19	CCV	322144508	06_21_2023	NPOC:24.94mg/L	Completed	8/10/2023 2:46:2	1
20	CCB		06_21_2023	NPOC:0.3729mg/L	Completed	8/10/2023 3:00:3	2
21	MBLK-08092023		06_21_2023	NPOC:0.1704mg/L	Completed	8/10/2023 3:13:5	3
22	LCS-08102023	3100606518	06_21_2023	NPOC:9.650mg/L	Completed	8/10/2023 3:29:5	4
23	LCSD-08102023		06_21_2023	NPOC:10.06mg/L	Completed	8/10/2023 3:45:5	5
24	HS23080616-01	TOC_DISS	06_21_2023	NPOC:0.8592mg/L	Completed	8/10/2023 4:00:2	17
25	HS23080616-01MS		06_21_2023	NPOC:11.04mg/L	Completed	8/10/2023 4:16:3	18
26	HS23080616-02		06_21_2023	NPOC:2.296mg/L	Completed	8/10/2023 4:31:3	19
27	HS23080556-01DF10	TOC_W	06_21_2023	NPOC:3.142mg/L	Completed	8/10/2023 4:46:3	20
28	HS23080556-01MS		06_21_2023	NPOC:12.79mg/L	Completed	8/10/2023 5:03:2	21
29	CCV	322144508	06_21_2023	NPOC:25.54mg/L	Completed	8/10/2023 5:20:3	22
30	CCB		06_21_2023	NPOC:0.3977mg/L	Completed	8/10/2023 5:34:3	23

TOC-Control L Report

2023_08_10_001.tlx

Instr.Information

Instrument Options: TOC/ASI/IC Unit/
Catalyst: Regular Sensitivity

Sample

Sample Name: CCV
Sample ID: 322144508
Origin: 06_21_2023B.cal
Status: Completed
Chk. Result

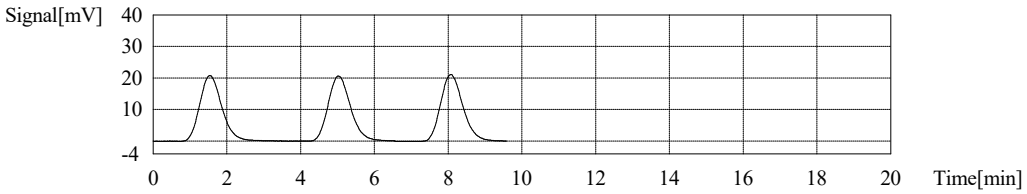
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.94mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.48	24.76mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 2:39:52 PM
2	87.24	24.69mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 2:43:11 PM
3	89.69	25.38mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 2:46:28 PM

Mean Area 88.14
Mean Conc. 24.94mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3729mg/L

1. Det

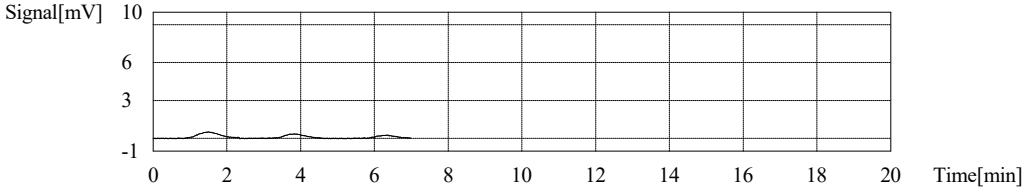
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.877	0.5312mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 2:55:33 PM
2	1.222	0.3458mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 2:58:15 PM
3	0.8537	0.2416mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:00:38 PM

TOC-Control L Report

2023_08_10_001.tlx

Mean Area 1.318
Mean Conc. 0.3729mg/L



Sample

Sample Name: MBLK-08092023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

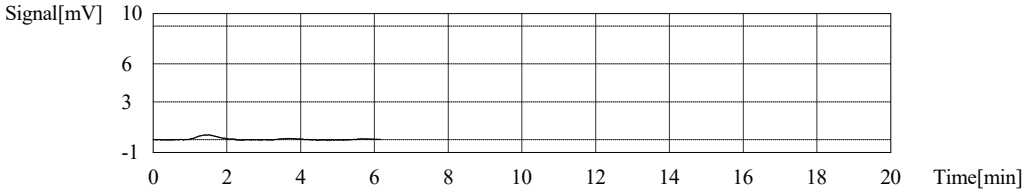
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1704mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.378	0.3900mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:09:37 PM
2	0.3148	0.08909mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:11:52 PM
3	0.1138	0.03221mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:13:59 PM

Mean Area 0.6022
Mean Conc. 0.1704mg/L



Sample

Sample Name: LCS-08102023
Sample ID: 3100606518
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.650mg/L

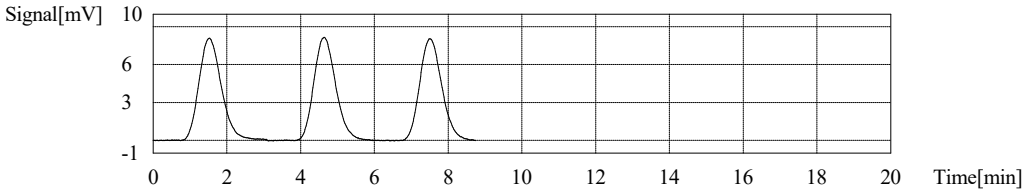
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.24	9.690mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:23:49 PM
2	33.98	9.617mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:26:56 PM
3	34.07	9.642mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:29:57 PM

TOC-Control L Report

Mean Area 34.10
Mean Conc. 9.650mg/L



Sample

Sample Name: LCSD-08102023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

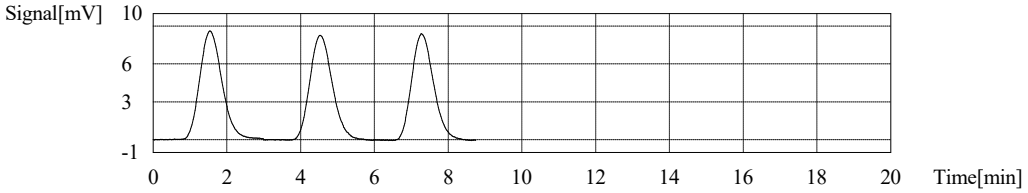
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.01	10.19mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:39:41 PM
2	35.20	9.962mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:42:43 PM
3	35.38	10.01mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 3:45:55 PM

Mean Area 35.53
Mean Conc. 10.06mg/L



Sample

Sample Name: HS23080556-01DF10
Sample ID: TOC_W
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.142mg/L

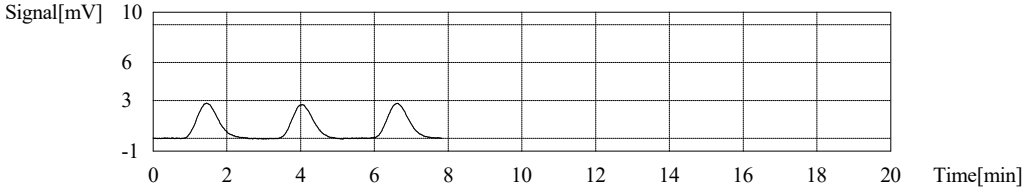
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	11.15	3.156mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 4:40:56 PM
2	10.89	3.082mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 4:43:45 PM
3	11.27	3.190mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 4:46:38 PM

TOC-Control L Report

Mean Area 11.10
Mean Conc. 3.142mg/L



Sample

Sample Name: HS23080556-01MS
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

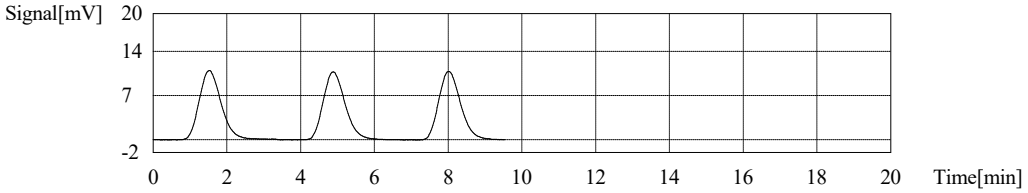
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:12.79mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.61	12.91mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 4:56:46 PM
2	44.85	12.69mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:00:10 PM
3	45.13	12.77mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:03:24 PM

Mean Area 45.20
Mean Conc. 12.79mg/L



Sample

Sample Name: CCV
Sample ID: 322144508
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.54mg/L

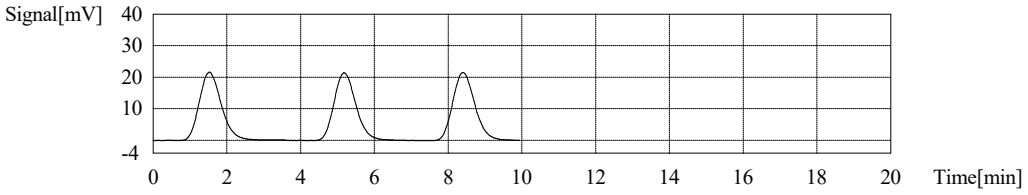
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.92	25.73mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:13:47 PM
2	89.23	25.25mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:17:16 PM
3	90.53	25.62mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:20:34 PM

TOC-Control L Report

Mean Area 90.23
Mean Conc. 25.54mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

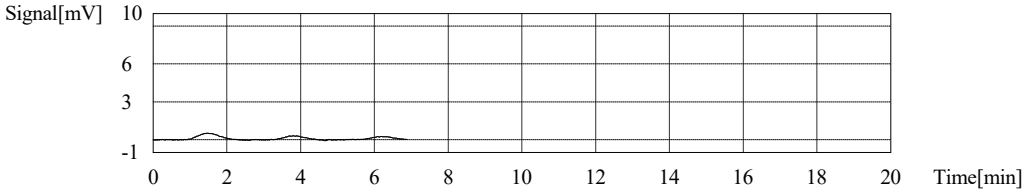
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3977mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.042	0.5779mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:29:38 PM
2	1.378	0.3900mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:32:14 PM
3	0.7954	0.2251mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	8/10/2023 5:34:38 PM

Mean Area 1.405
Mean Conc. 0.3977mg/L



HS23080556-E2300718 Perchlorate Final Report IV

ALS WO# HS23080556

August 09, 2023 Service Request No:E2300718

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS23080556

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory August 09, 2023
For your reference, these analyses have been assigned our service request number **E2300718.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2188. You may also contact me via email at James.Guin@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (281)530-5656 Fax (281)530-5887
www.alsglobal.com

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300718
Project:	HS23080556	**Date Received:**	08/09/23
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt.

Three samples were received for analysis at ALS Environmental in Houston on 08/09/23.

The samples were received in good condition and is consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2300381: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of MS/MSD for this extraction batch.

Detection Limits

Detection limits are calculated for each analyte in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2300718
Project: HS23080556

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300718-001	LH18/24-SP650_080823_Between IX	8/8/2023	1300
E2300718-002	LH18/24-SP650_080823_AIX	8/8/2023	1300
E2300718-003	LH18/24-SP650_080823_BIX	8/8/2023	1300

Service Request Summary

Folder #: **E2300718**
Client Name: ALS Environmental - US
Project Name: HS23080556
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/09/23
Internal Due Date: 8/10/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080556
EDD: No EDD Specified

3 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300718-001	LH18/24-SP650_080823_Between IX	Water	08/08/23 1300	**IV**
E2300718-002	LH18/24-SP650_080823_AIX	Water	08/08/23 1300	**IV**
E2300718-003	LH18/24-SP650_080823_BIX	Water	08/08/23 1300	**IV**

Service Request Summary

Folder #: **E2300718**
Client Name: ALS Environmental - US
Project Name: HS23080556
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 08/09/23
Internal Due Date: 8/10/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23080556
EDD: No EDD Specified

3 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:
Rush

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	Internal standard not within the specified limits. See case narrative.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated Value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.

Data Qualifiers

Lab Standard

M1	Matrix interference due to coelution with a non-target compound; results may be biased high.
N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

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State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2022-141	8/31/2023
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

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RUSH

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Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22647

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS23080556
TSR:	Houston House Acct

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23080556-02**	**LH18/24-SP650_080823_Between IX**	**Water**	**08 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			10 Aug 2023
2.	**HS23080556-03**	**LH18/24-SP650_080823_AIX**	**Water**	**08 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			10 Aug 2023
3.	**HS23080556-04**	**LH18/24-SP650_080823_BIX**	**Water**	**08 Aug 2023 13:00**
	6850-Perch. DOD Level II & Level IV in separate pdf			10 Aug 2023

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
RUSH 24Hr.TAT

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 8.9.23 1123

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist: JG

Client/Project: ALS

Thermometer ID: IR91

Date/Time Received: 8-9-23 Initials: cy

Date/Time Logged in: 8-9-23 Initials: cy

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ● Courier (ALS) ○ Client

2. Samples received in: ● Cooler ○ Box ○ Envelope ○ Other _____

3. Were custody seals on coolers? ○ Yes ● No
   Were they intact? ○ Yes ○ No ● N/A
   Were they signed and dated? ○ Yes ○ No ● N/A
   If yes, how many and where?

4. Packing Material: ○ Inserts ● Baggies ○ Bubble Wrap ○ Gel Packs ● Wet Ice ○ Sleeves ○ Other _____

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling: _____

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		8-9-23	1125	cy	3.2	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ● Yes ○ No
7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ● Yes ○ No
8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ● Yes ○ No
9. Were appropriate bottles/containers and volumes received for the requested tests? ● Yes ○ No
10. Did sample labels and tags agree with custody documents? ● Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

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F: +1 281 530 5887
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SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

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Phone (281)530-5656 Fax (281)530-5887
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Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300708-001	LH18/24-SP650_080123_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2300709-001	LH18/24-SP140_080123	.01	6850/ClO4 DOD			Water	10mL	
3	E2300711-001	04WW09_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300711-002	04WW10_080123	.02	6850/ClO4 DOD			Ground Water	10mL	
5	E2300711-003	04WW05_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300711-004	04WW11_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300711-005	04WW07_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300711-006	04WW07_080123_a	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300711-007	04WW04_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300711-008	04WW01_080123	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300716-001	1824DPTMW07_080223	.01	6850/ClO4 DOD			Water	10mL	
12	E2300718-001	LH18/24-SP650_080823_Between IX	.01	6850/ClO4 DOD			Water	10mL	
13	E2300718-002	LH18/24-SP650_080823_AIX	.01	6850/ClO4 DOD			Water	10mL	
14	E2300718-003	LH18/24-SP650_080823_BIX	.01	6850/ClO4 DOD			Water	10mL	
15	EQ2300381-01	MB		6850/ClO4			Liquid	10mL	
16	EQ2300381-02	LCS		6850/ClO4			Liquid	10mL	
17	EQ2300381-03	DLCS		6850/ClO4			Liquid	10mL	
18	EQ2300381-04	04WW10_080123 MS	.02	6850/ClO4 DOD			Liquid	10mL	
19	EQ2300381-05	04WW10_080123 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
20	K2308781-001	LGAC-INF-080723	.01	6850/ClO4			Water	10mL	
21	K2308781-002	LGAC-INT1-080723	.01	6850/ClO4			Water	10mL	
22	K2308781-003	LGAC-INT2-080723	.01	6850/ClO4			Water	10mL	
23	R2306562-017	2307210621 PFE-1	.01	6850/ClO4			Water	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 230342 Logbook Ref: Perchlorate (1st Source) Expires On: 03/07/2024

EQ2300381-02	1.00µL	EQ2300381-02	1.00µL	EQ2300381-03	1.00µL	EQ2300381-03	1.00µL	EQ2300381-04	1.00µL	EQ2300381-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 230372 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2300708-001	100.00µL	E2300709-001	100.00µL	E2300711-001	100.00µL	E2300711-002	100.00µL	E2300711-003	100.00µL	E2300711-004	100.00µL
E2300711-005	100.00µL	E2300711-006	100.00µL	E2300711-007	100.00µL	E2300711-008	100.00µL	E2300716-001	100.00µL	E2300718-001	100.00µL
E2300718-002	100.00µL	E2300718-003	100.00µL	EQ2300381-01	100.00µL	EQ2300381-01	100.00µL	EQ2300381-02	100.00µL	EQ2300381-02	100.00µL
EQ2300381-03	100.00µL	EQ2300381-03	100.00µL	EQ2300381-04	100.00µL	EQ2300381-05	100.00µL	K2308781-001	100.00µL	K2308781-002	100.00µL
K2308781-003	100.00µL	R2306562-017	100.00µL								

Preparation Information Benchsheet

Prep Run#: 424245 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 8/9/23 09:01

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	luer-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 8/9/23 09:01
Finished: 8/9/23 09:53
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	8/ 8/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 9/23
Sample Name:	LH18/24-SP650_080823_Between IX	**Units:**	µg/L
Lab Code:	E2300718-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.639**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 13:06	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	8/ 8/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 9/23
Sample Name:	LH18/24-SP650_080823_AIX	**Units:**	µg/L
Lab Code:	E2300718-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.318**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 13:12	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	8/ 8/23 1300
Sample Matrix:	Water	**Date Received:**	8/ 9/23
Sample Name:	LH18/24-SP650_080823_BIX	**Units:**	µg/L
Lab Code:	E2300718-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**157**		1.00	0.500	0.250	10	8/ 9/23	8/9/23 13:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300381-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:23	424245	813305	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556
Sample Matrix: Water

Service Request: E2300718
Date Analyzed: 8/ 9/23

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 424245

	Lab Control Sample EQ2300381-02			Duplicate Lab Control Sample EQ2300381-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0995	0.100	100	0.102	0.100	102	84 - 119	2	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0995**	J	0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:29	424245	813305	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300381-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.102**		0.100	0.0500	0.0250	1	8/ 9/23	8/9/23 10:34	424245	813305	

Initial Calibration

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20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230802-001	Perchlorate6850c.lcm	1x		8/2/2023 13:05
2	IB		2230802-002	Perchlorate6850c.lcm	1x		8/2/2023 13:11
3	Perchlorate ICAL 1		2230802-003	Perchlorate6850c.lcm	1x	230373	8/2/2023 13:17
4	Perchlorate ICAL 2		2230802-004	Perchlorate6850c.lcm	1x	230375	8/2/2023 13:23
5	Perchlorate ICAL 3		2230802-005	Perchlorate6850c.lcm	1x	230376	8/2/2023 13:28
6	Perchlorate ICAL 4		2230802-006	Perchlorate6850c.lcm	1x	230377	8/2/2023 13:34
7	Perchlorate ICAL 5		2230802-007	Perchlorate6850c.lcm	1x	230378	8/2/2023 13:39
8	Perchlorate ICAL 6		2230802-008	Perchlorate6850c.lcm	1x	230379	8/2/2023 13:45
9	Perchlorate ICAL 7		2230802-009	Perchlorate6850c.lcm	1x	230380	8/2/2023 13:50
10	Perchlorate ICAL 8		2230802-010	Perchlorate6850c.lcm	1x	230381	8/2/2023 13:56
11	Perchlorate ICAL 9		2230802-011	Perchlorate6850c.lcm	1x	230382	8/2/2023 14:02
12	Perchlorate ICAL 10		2230802-012	Perchlorate6850c.lcm	1x	230383	8/2/2023 14:07
13	PerchlorateICV		2230802-013	Perchlorate6850c.lcm	1x	230385	8/2/2023 14:19

Initial Calibration - Detailed Report

Calibration ID: EC2300012 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300012-01	Perchlorate ICAL 1	2230802-003	08/02/2023 13:17
02	EC2300012-02	Perchlorate ICAL 2	2230802-004	08/02/2023 13:23
03	EC2300012-03	Perchlorate ICAL 3	2230802-005	08/02/2023 13:28
04	EC2300012-04	Perchlorate ICAL 4	2230802-006	08/02/2023 13:34
05	EC2300012-05	Perchlorate ICAL 5	2230802-007	08/02/2023 13:39
06	EC2300012-06	Perchlorate ICAL 6	2230802-008	08/02/2023 13:45
07	EC2300012-07	Perchlorate ICAL 7	2230802-009	08/02/2023 13:50
08	EC2300012-08	Perchlorate ICAL 8	2230802-010	08/02/2023 13:56
09	EC2300012-09	Perchlorate ICAL 9	2230802-011	08/02/2023 14:02
10	EC2300012-10	Perchlorate ICAL 10	2230802-012	08/02/2023 14:07

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.086** **Average RF = 0.1475**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1428	02	0.5000	0.1421	03	0.7000	0.1457	04	1.0000	0.149
05	2.0000	0.1515	06	5.0000	0.1475	07	10.0000	0.1503	08	20.0000	0.1477
09	30.0000	0.1485	10	50.0000	0.1496						

Analyte

Perchlorate RSE = 2.09

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.0968	-3.2	02	0.5000	0.482	-3.6	03	0.7000	0.692	-1.2
04	1.0000	1.01	1.0	05	2.0000	2.05	2.7	06	5.0000	5.00	-0.0
07	10.0000	10.2	1.9	08	20.0000	20.0	0.2	09	30.0000	30.2	0.7
10	50.0000	50.7	1.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300012	**Instrument ID:**	E-LCMS-01
Datafile ID:	2230802-013	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300012-11	T	Average RF	10	10.670	ng/mL	6.7	<= 15

Insight Report

Printed at 8/3/2023 9:30:46 AM

Method File: I:\LCMS01\DATA\20230802\20230802ICAL.lcm
Project File: I:\LCMS01\DATA\20230802\no use\20230802ICAL.damlp

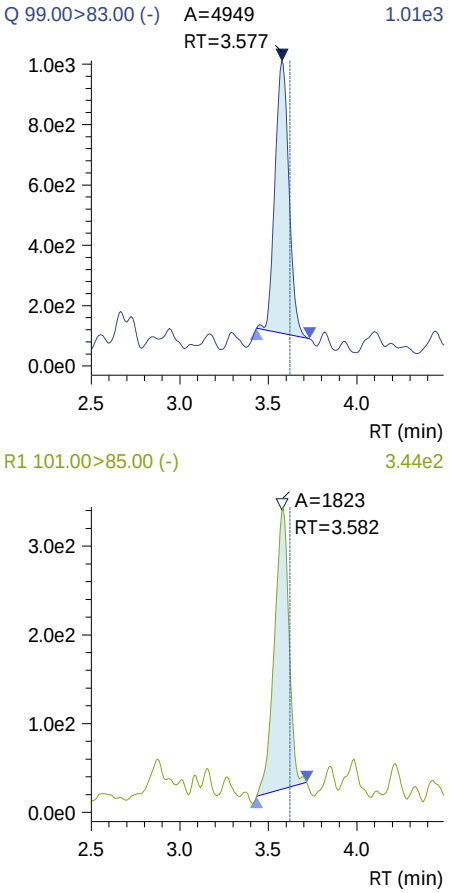
Perchlorate ICAL 1

Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	4949	346538	0.0968	ng/mL	101.00 >85.00	36.83	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.572	346538	346538	1.0000	ng/mL	----	----	

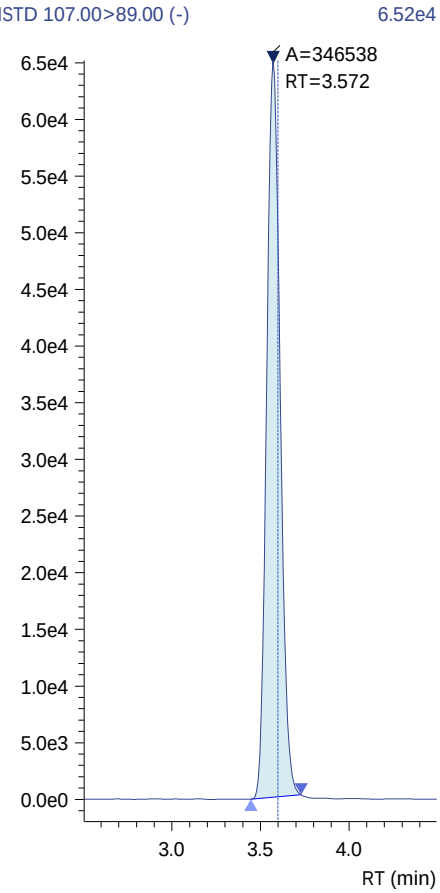
Perchlorate

Conc 0.0968
R#1 36.83 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

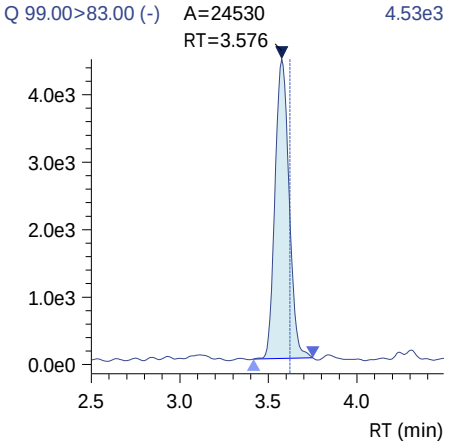
Perchlorate ICAL 2

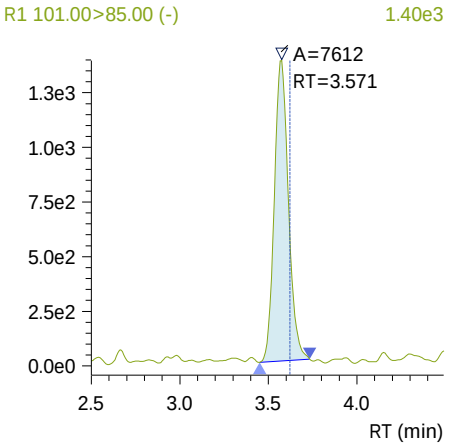
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	24530	345149	0.4820	ng/mL	101.00 >85.00	31.03	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.571	345149	345149	1.0000	ng/mL	----	----	

Perchlorate

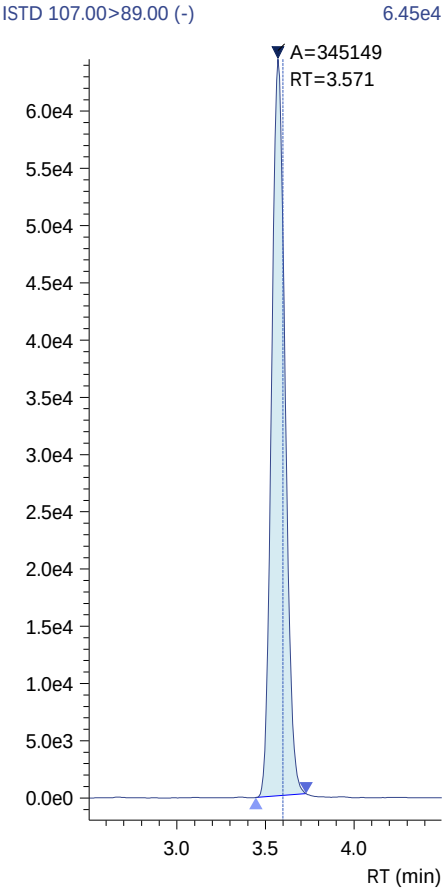
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

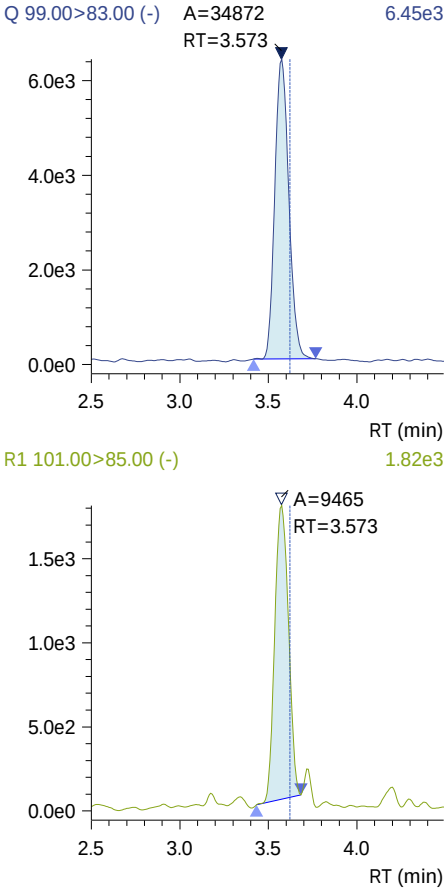
Perchlorate ICAL 3

Sample ID: Perchlorate ICAL 3
Date Acquired: 8/2/2023 1:28:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-005.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	34872	341974	0.6915	ng/mL	101.00 >85.00	27.14	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	341974	341974	1.0000	ng/mL	----	----	

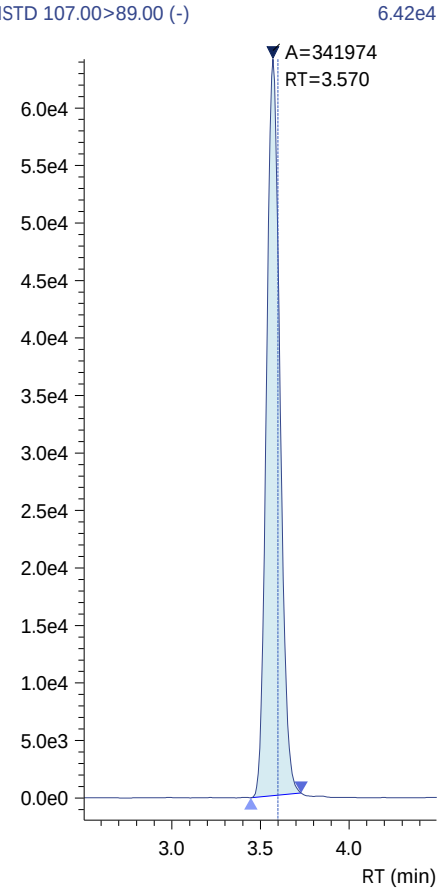
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

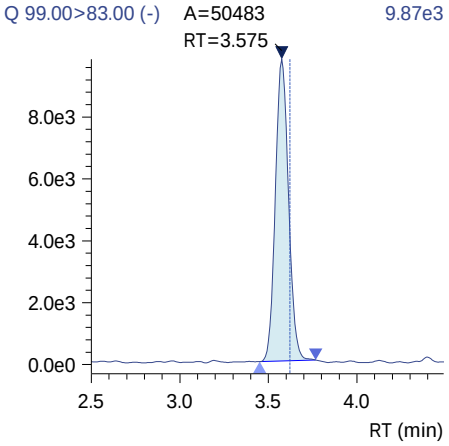
Perchlorate ICAL 4

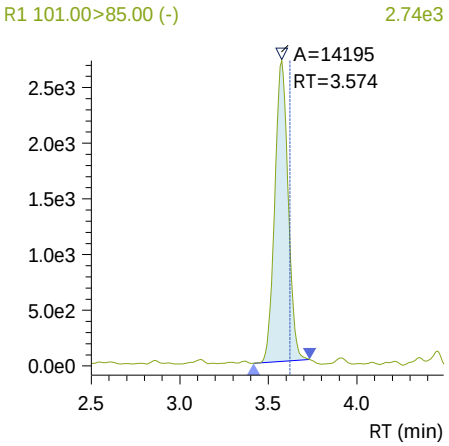
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	50483	338838	1.0104	ng/mL	101.00 >85.00	28.12	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	338838	338838	1.0000	ng/mL	----	----	

Perchlorate

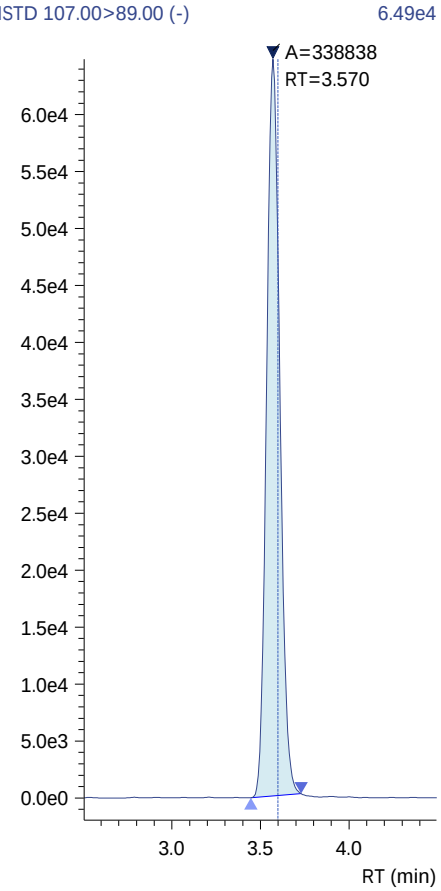
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

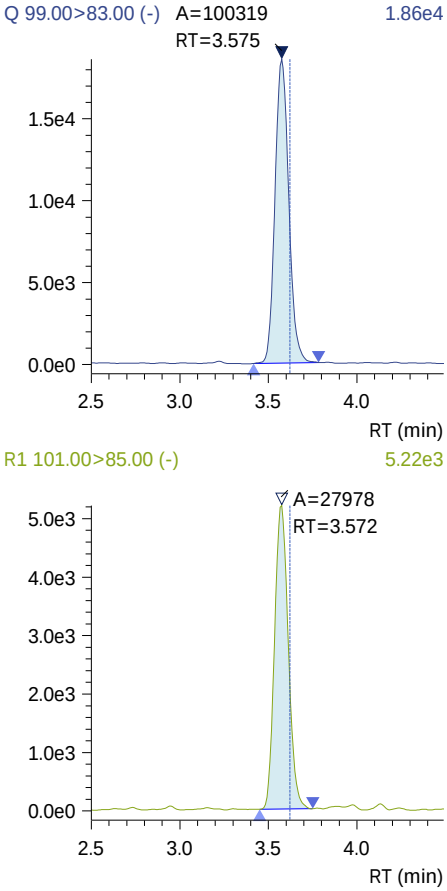
Perchlorate ICAL 5

Sample ID: Perchlorate ICAL 5
Date Acquired: 8/2/2023 1:39:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-007.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	100319	331124	2.0545	ng/mL	101.00 >85.00	27.89	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	331124	331124	1.0000	ng/mL	----	----	

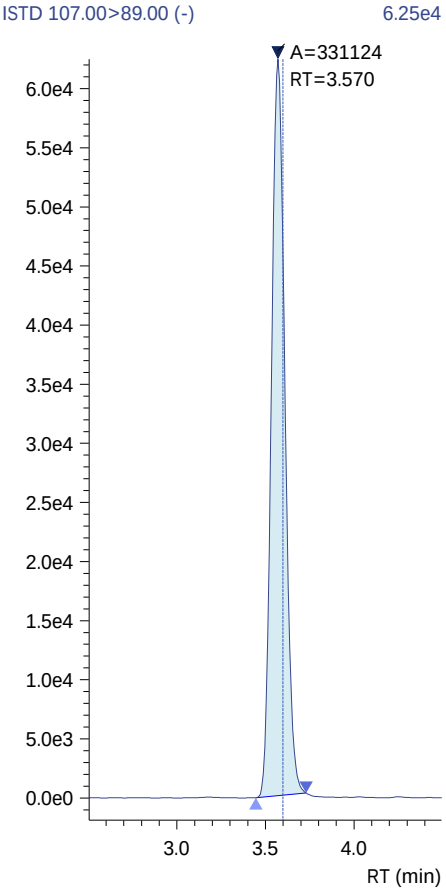
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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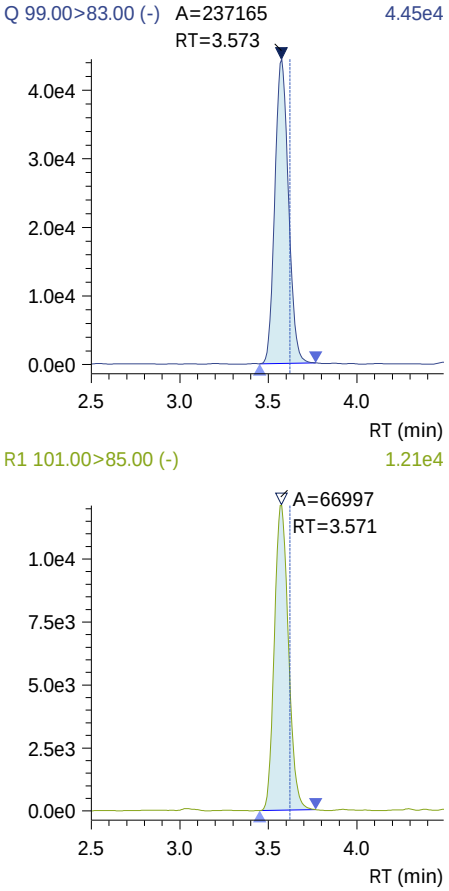
Perchlorate ICAL 6

Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	237165	321666	5.0000	ng/mL	101.00 >85.00	28.25	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.570	321666	321666	1.0000	ng/mL	----	----	

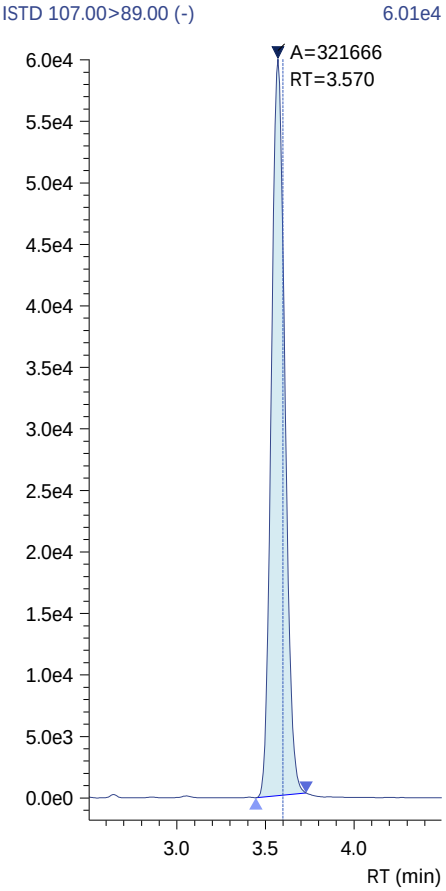
Perchlorate

Conc 5.0000
R#1 28.25 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

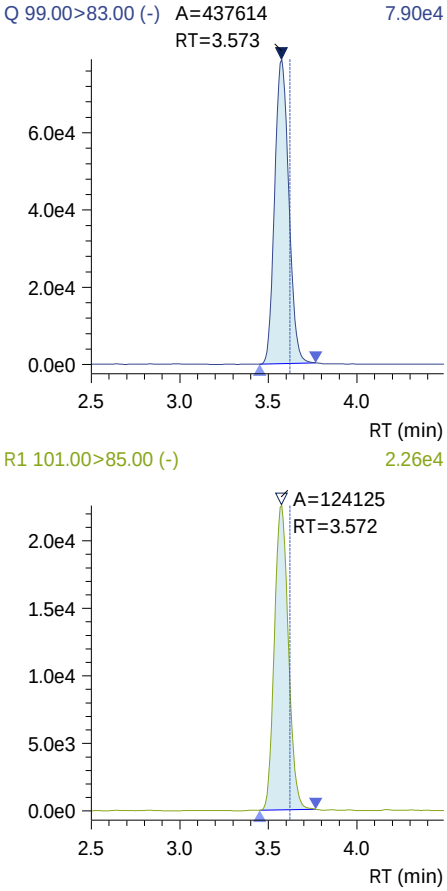
Perchlorate ICAL 7

Sample ID: Perchlorate ICAL 7
Date Acquired: 8/2/2023 1:50:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-009.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	437614	291215	10.1905	ng/mL	101.00 >85.00	28.36	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291215	291215	1.0000	ng/mL	----	----	

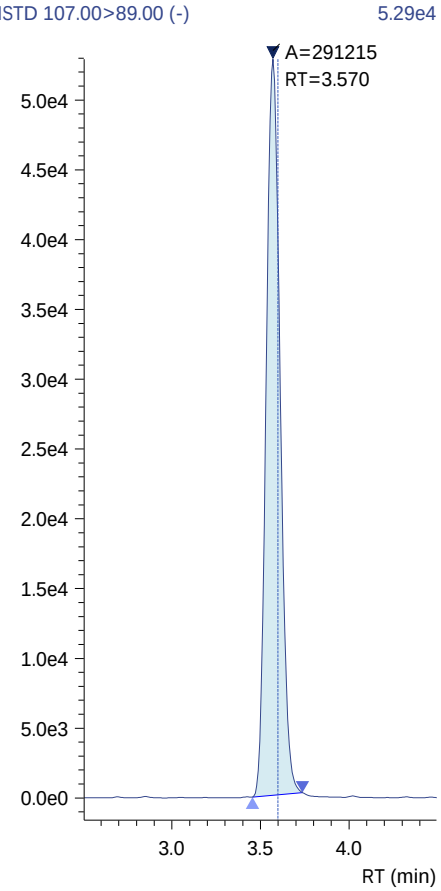
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 8

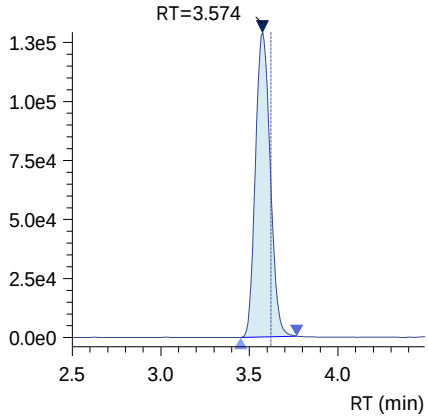
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	749856	253829	20.03 36	ng/mL	101.00 >85.00	28.56	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.569	253829	253829	1.0000	ng/mL	----	----	

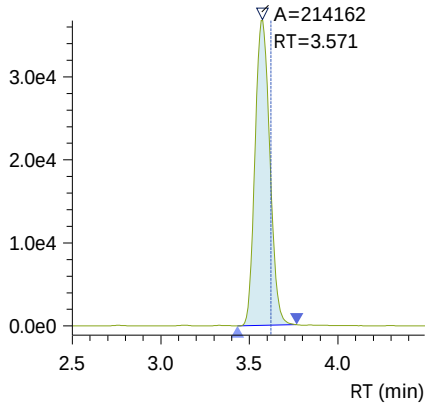
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



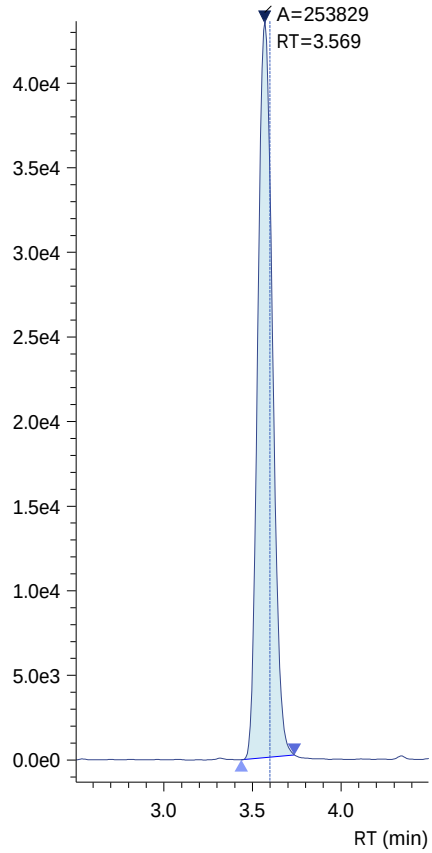
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 9

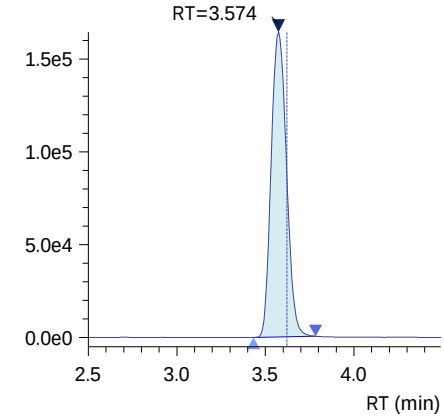
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	990671	222379	30.2105	ng/mL	101.00 >85.00	27.95	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.568	222379	222379	1.0000	ng/mL	----	----	

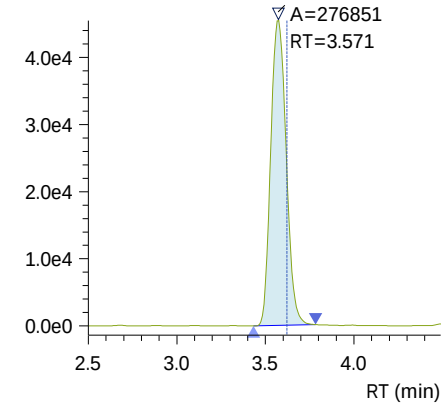
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 RT=3.574 1.64e5



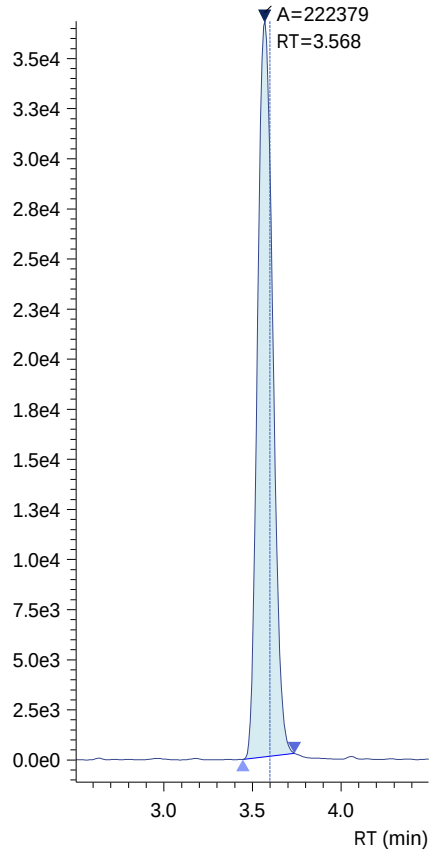
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

Perchlorate ICAL 10

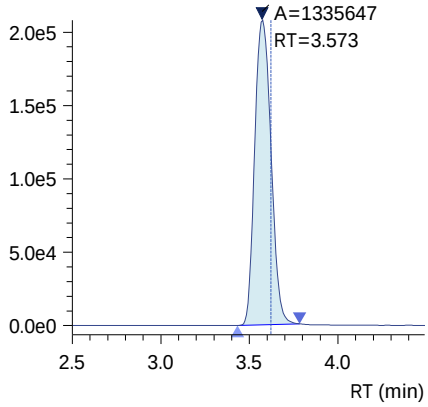
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1335647	178573	50.72 20	ng/mL	101.00 >85.00	28.04	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.567	178573	178573	1.0000	ng/mL	----	----	

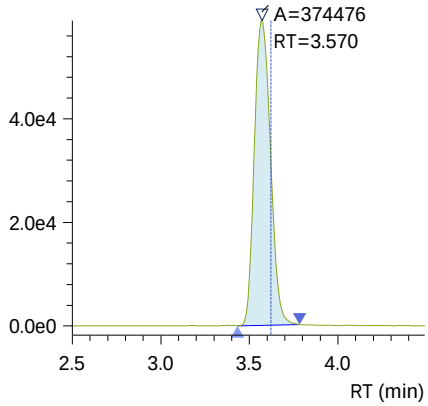
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



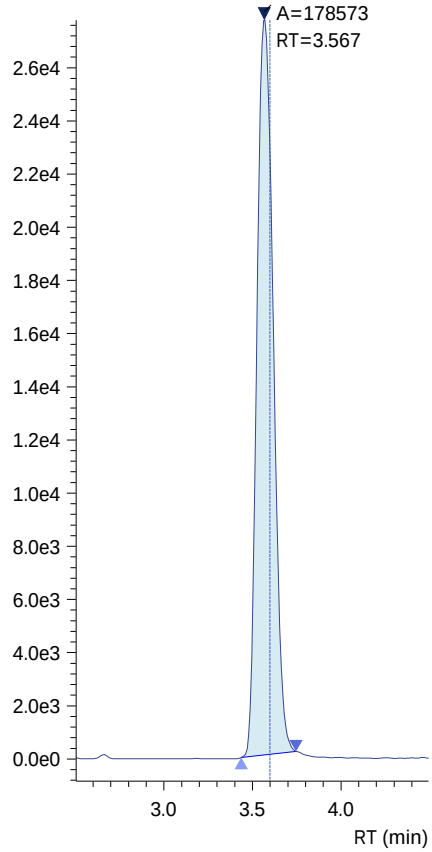
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

Printed at 8/3/2023 9:30:46 AM

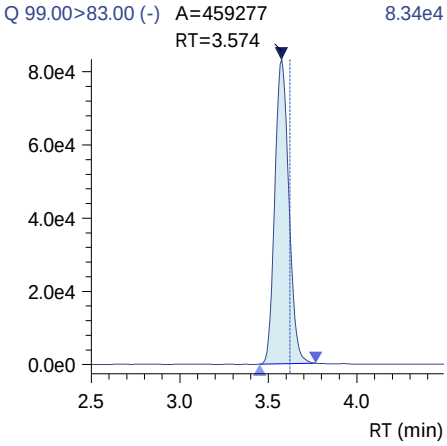
PerchlorateICV

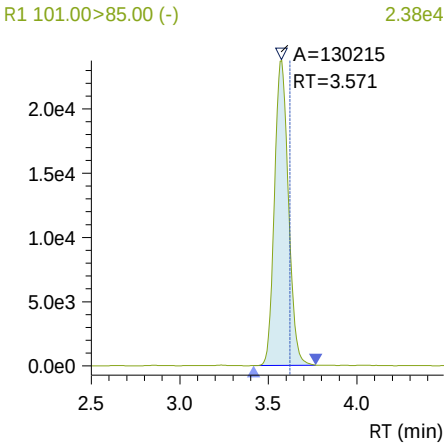
Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.574	459277	291890	10.6703	ng/mL	101.00 >85.00	28.35	21.29-39.54
Sodium Perchlorate-18O4_IS	Auto	3.570	291890	291890	1.0000	ng/mL	----	----	

Perchlorate

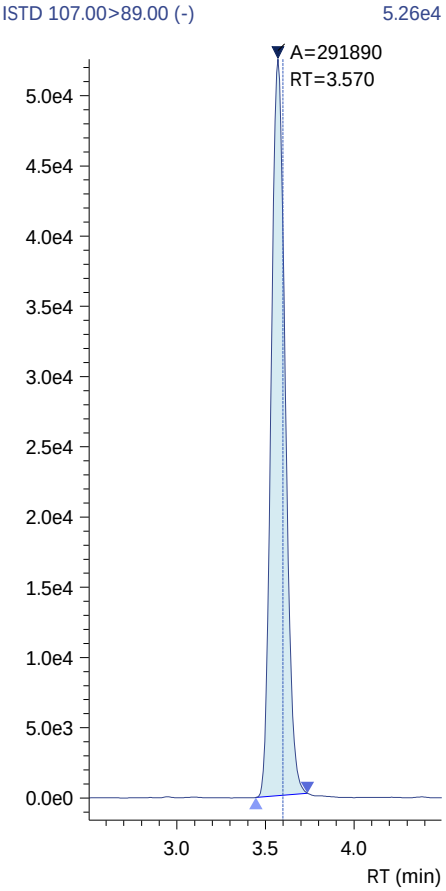
Conc 10.6703
R#1 28.35 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230808-813305

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

ICAL Date: 8/2/2023
Cal. Std. xp: 03/07/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		2230808-001	Perchlorate6850c.lcm	1x		8/9/2023 9:59
2	LODV		2230808-002	Perchlorate6850c.lcm	1x	230386	8/9/2023 10:04
3	ICS		2230808-003	Perchlorate6850c.lcm	1x		8/9/2023 10:10
4	CCV		2230808-004	Perchlorate6850c.lcm	1x	230380	8/9/2023 10:18
5	EQ2300381-01		2230808-005	Perchlorate6850c.lcm	1x		8/9/2023 10:23
6	EQ2300381-02		2230808-006	Perchlorate6850c.lcm	1x		8/9/2023 10:29
7	EQ2300381-03		2230808-007	Perchlorate6850c.lcm	1x		8/9/2023 10:34
8	K2308781-001		2230808-008	Perchlorate6850c.lcm	1x		8/9/2023 10:46
9	K2308781-002		2230808-009	Perchlorate6850c.lcm	1x		8/9/2023 10:51
10	K2308781-003		2230808-010	Perchlorate6850c.lcm	1x		8/9/2023 10:57
11	R2306562-017		2230808-011	Perchlorate6850c.lcm	1x		8/9/2023 11:02
12	E2300716-001		2230808-012	Perchlorate6850c.lcm	1x		8/9/2023 11:08
13	E2300708-001		2230808-013	Perchlorate6850c.lcm	1x		8/9/2023 11:14
14	E2300709-001		2230808-014	Perchlorate6850c.lcm	1000x		8/9/2023 11:19
15	CCV		2230808-015	Perchlorate6850c.lcm	1x	230380	8/9/2023 11:25
16	E2300711-002		2230808-017	Perchlorate6850c.lcm	1x		8/9/2023 11:36
17	EQ2300381-04		2230808-018	Perchlorate6850c.lcm	1x		8/9/2023 11:41
18	EQ2300381-05		2230808-019	Perchlorate6850c.lcm	1x		8/9/2023 11:47
19	E2300711-001		2230808-016	Perchlorate6850c.lcm	1x	DNU-IS	8/9/2023 11:30
20	E2300711-003		2230808-020	Perchlorate6850c.lcm	1x		8/9/2023 11:53
21	E2300711-004		2230808-021	Perchlorate6850c.lcm	1x		8/9/2023 11:58
22	E2300711-005		2230808-022	Perchlorate6850c.lcm	1x		8/9/2023 12:04
23	E2300711-006		2230808-023	Perchlorate6850c.lcm	1x		8/9/2023 12:09
24	E2300711-007		2230808-024	Perchlorate6850c.lcm	1x		8/9/2023 12:15
25	E2300711-008		2230808-025	Perchlorate6850c.lcm	1x		8/9/2023 12:20
26	CCV		2230808-026	Perchlorate6850c.lcm	1x	230380	8/9/2023 12:26
27	E2300711-001		2230808-027	Perchlorate6850c.lcm	1x		8/9/2023 12:44
28	E2300718-001		2230808-028	Perchlorate6850c.lcm	1x		8/9/2023 13:06
29	E2300718-002		2230808-029	Perchlorate6850c.lcm	1x		8/9/2023 13:12
30	E2300718-003		2230808-030	Perchlorate6850c.lcm	10x		8/9/2023 13:29
32	CCV		2230803-031	Perchlorate6850c.lcm	1x	230380	8/3/2023 12:04

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Analyzed:**	8/9/23 10:18

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-004	**Lab Code:**	EQ2300385-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-01	293,010	3.58
Method Blank	EQ2300381-01	348,388	3.58
Lab Control Sample	EQ2300381-02	345,049	3.58
Duplicate Lab Control Sample	EQ2300381-03	340,635	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Analyzed:**	8/9/23 11:25

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-015	**Lab Code:**	EQ2300385-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-02	289,217	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556

Service Request: E2300718
Date Analyzed: 8/9/23 12:26

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20230808\2230808-026
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300385-03
Analysis Lot: 813305
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-03	292,242	3.58
LH18/24-SP650_080823_Between IX	E2300718-001	383,878	3.58
LH18/24-SP650_080823_AIX	E2300718-002	382,294	3.58
LH18/24-SP650_080823_BIX	E2300718-003	270,634	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300718
Project:	HS23080556	**Date Analyzed:**	8/9/23 13:38

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20230808\2230808-031	**Lab Code:**	EQ2300385-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	813305
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2300385-04	288,788	3.58

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556

Service Request: E2300718
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-004

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1513	2.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556

Service Request: E2300718
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1511	2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556

Service Request: E2300718
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-026

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1495	1.4	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23080556

Service Request: E2300718
Date Analyzed: 8/ 9/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230808\2230808-031

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 813305
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1505	2.1	NA	± 15 %	Average RF

Insight Report

Printed at 8/9/2023 1:55:45 PM

Method File: I:\LCMS01\DATA\20230808\20230808.lcm
Project File: I:\LCMS01\DATA\20230808\20230808.damlp

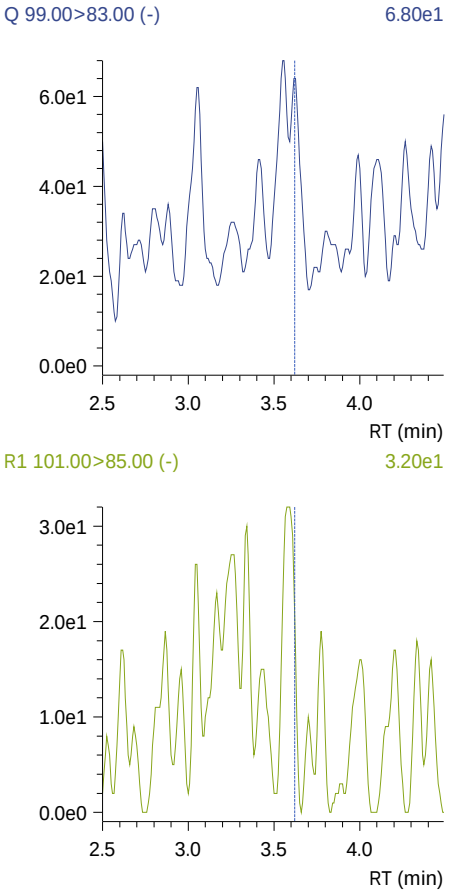
IB

Sample ID: IB
Date Acquired: 8/9/2023 9:59:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	376063	----	ng/mL	101.00 >85.00	0.00	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.582	376063	376063	1.0000	ng/mL	----	----	

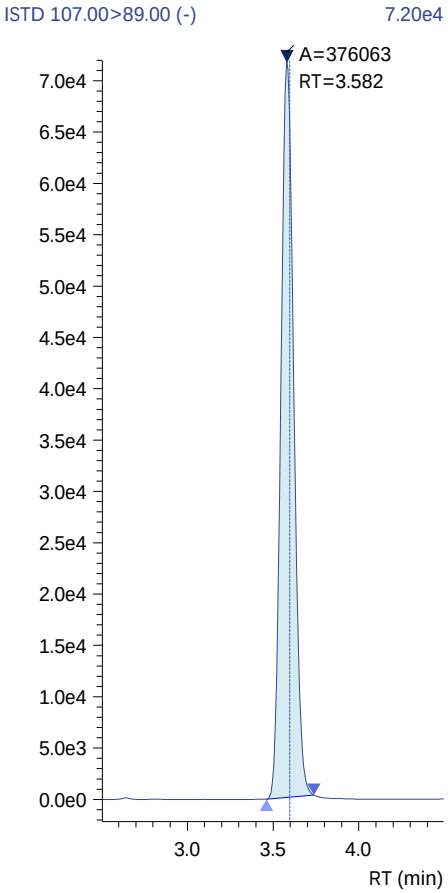
Perchlorate

Conc ----
R#1 0.00 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

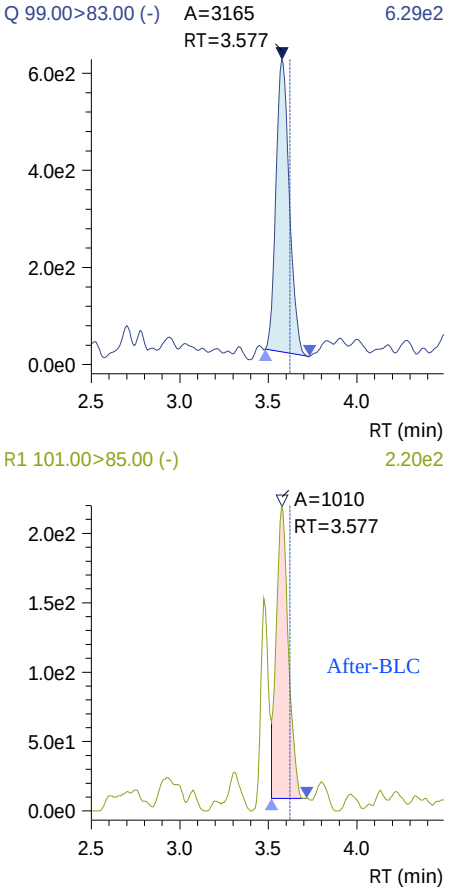
LODV

Sample ID: LODV
Date Acquired: 8/9/2023 10:04:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.577	3165	350096	0.0613	ng/mL	101.00 >85.00	31.90	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3500 96	350096	1.0000	ng/mL	----	----	

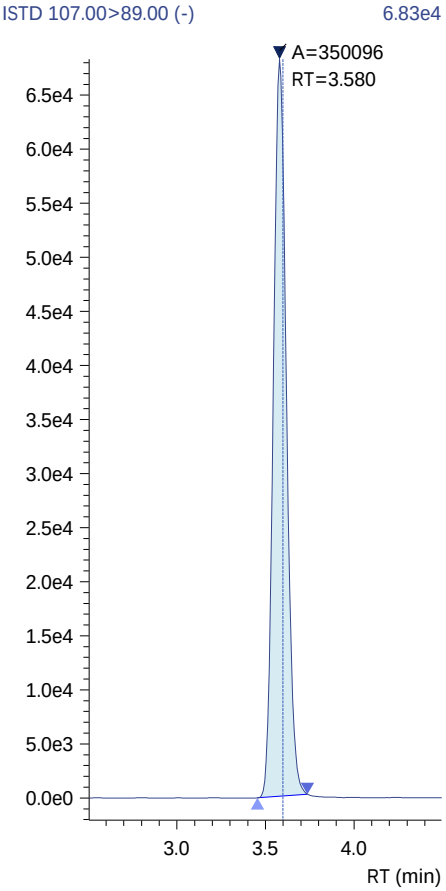
Perchlorate

Conc 0.0613
R#1 31.90 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:59:12 PM

Method File: I:\LCMS01\DATA\20230808\20230808.lcm
Project File: I:\LCMS01\DATA\20230808\20230808.damlp

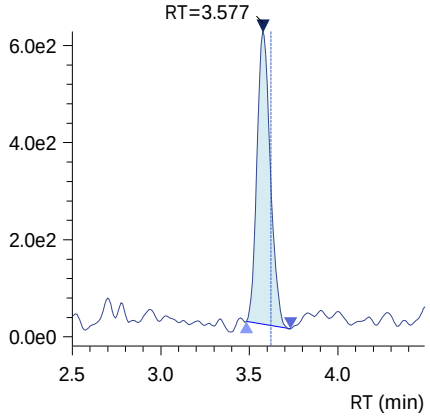
LODV

Sample ID: LODV
Date Acquired: 8/9/2023 10:04:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-002.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 1

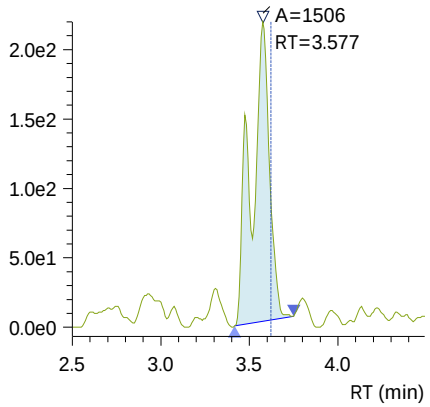
Perchlorate

Conc 0.0613
R#1 47.59 (27.74)

Q 99.00>83.00 (-) A=3165 6.29e2



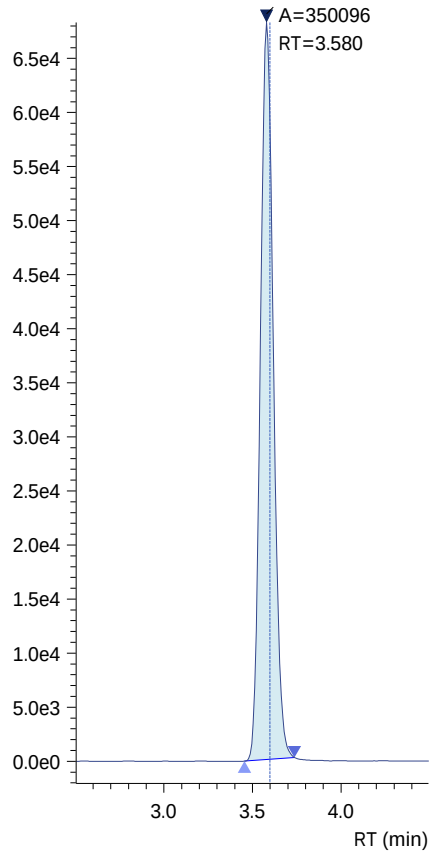
R1 101.00>85.00 (-) 2.20e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.83e4



Insight Report

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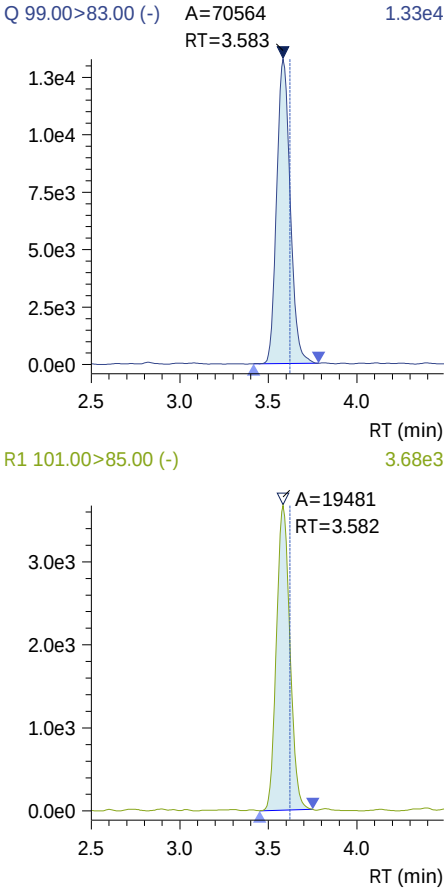
ICS

Sample ID: ICS
Date Acquired: 8/9/2023 10:10:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.583	70564	423644	1.1295	ng/mL	101.00 >85.00	27.61	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	4236 44	423644	1.0000	ng/mL	----	----	

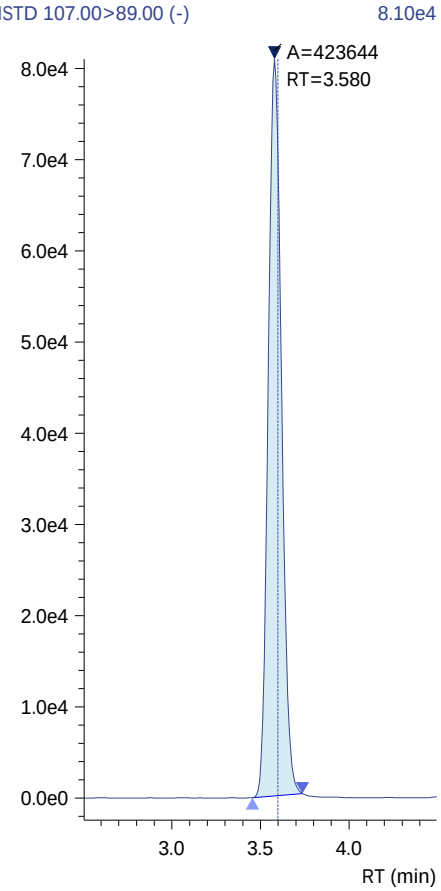
Perchlorate

Conc 1.1295
R#1 27.61 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

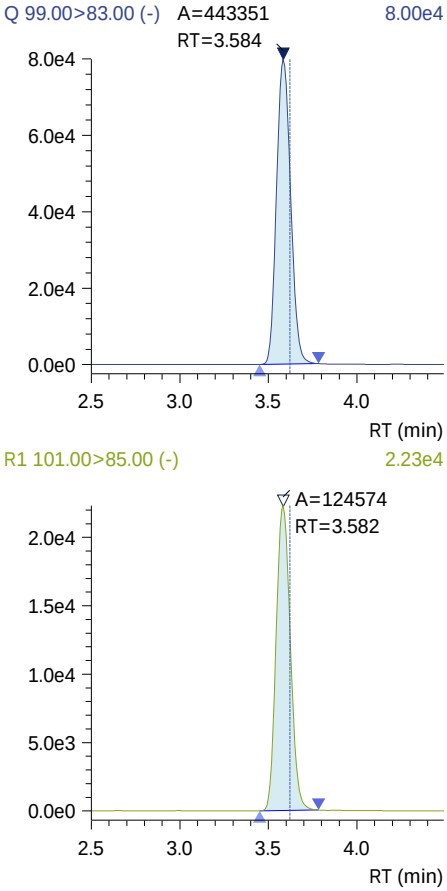
CCV

Sample ID: CCV
Date Acquired: 8/9/2023 10:18:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-004.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.584	443351	293010	10.2609	ng/mL	101.00 >85.00	28.10	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.580	293010	293010	1.0000	ng/mL	----	----	

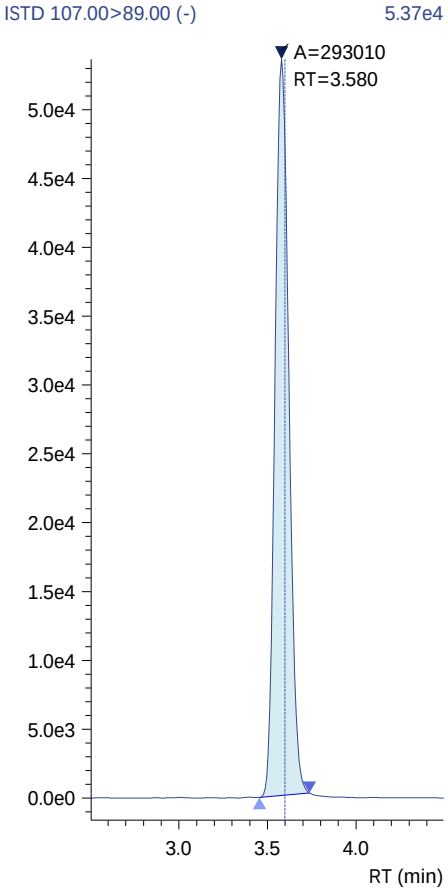
Perchlorate

Conc 10.2609
R#1 28.10 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

EQ2300381-01

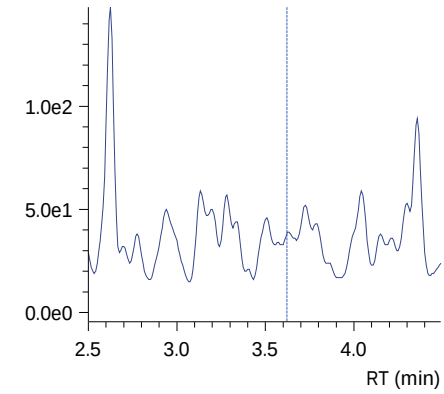
Sample ID: EQ2300381-01
Date Acquired: 8/9/2023 10:23:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-005.lcd
Vial: 25 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	348388	----	ng/mL	101.00 >85.00	0.00	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.579	348388	348388	1.0000	ng/mL	----	----	

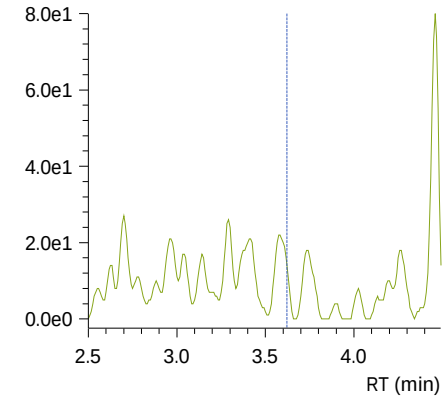
Perchlorate

Conc ----
R#1 0.00 (27.74)

Q 99.00>83.00 (-) 1.48e2



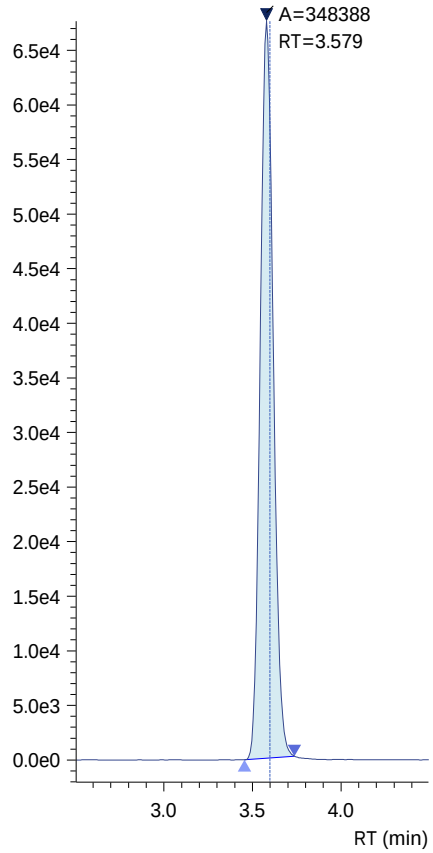
R1 101.00>85.00 (-) 8.00e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.77e4



Insight Report

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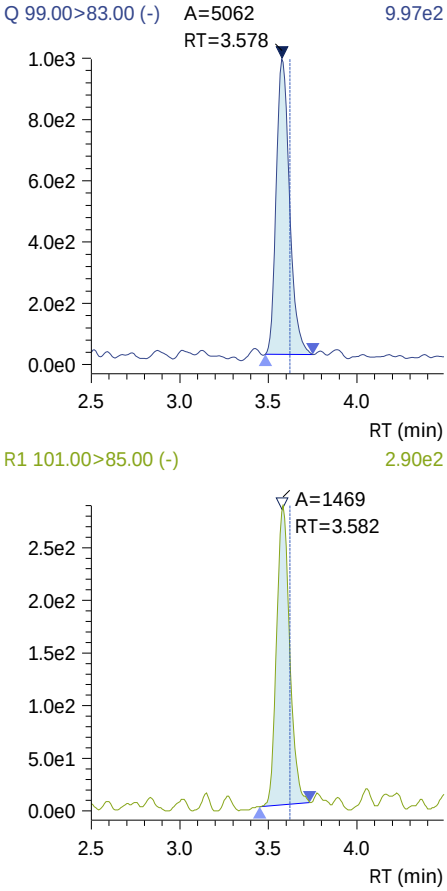
EQ2300381-02

Sample ID: EQ2300381-02
Date Acquired: 8/9/2023 10:29:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-006.lcd
Vial: 26 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	5062	345049	0.0995	ng/mL	101.00 >85.00	29.01	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3450 49	345049	1.0000	ng/mL	----	----	

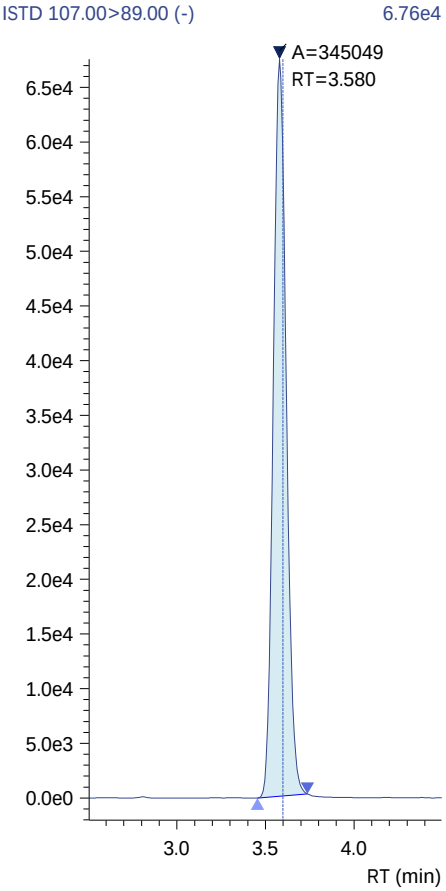
Perchlorate

Conc 0.0995
R#1 29.01 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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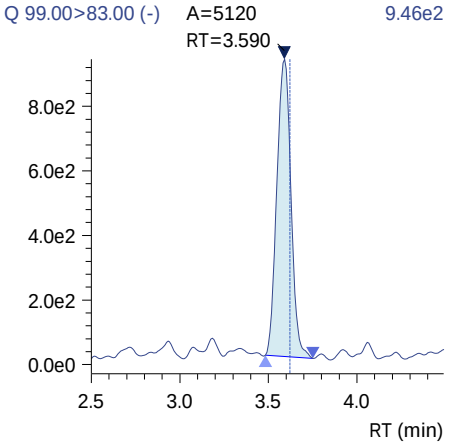
EQ2300381-03

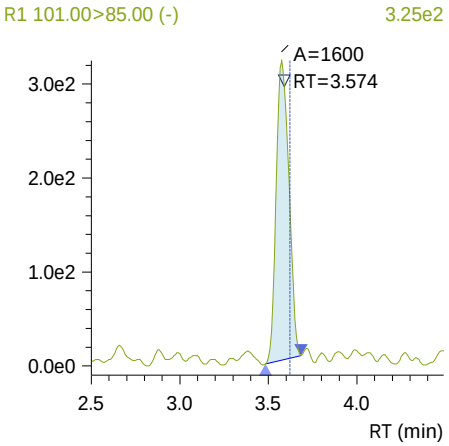
Sample ID: EQ2300381-03
Date Acquired: 8/9/2023 10:34:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-007.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	5120	340635	0.1019	ng/mL	101.00 >85.00	31.26	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.580	3406 35	340635	1.0000	ng/mL	----	----	

Perchlorate

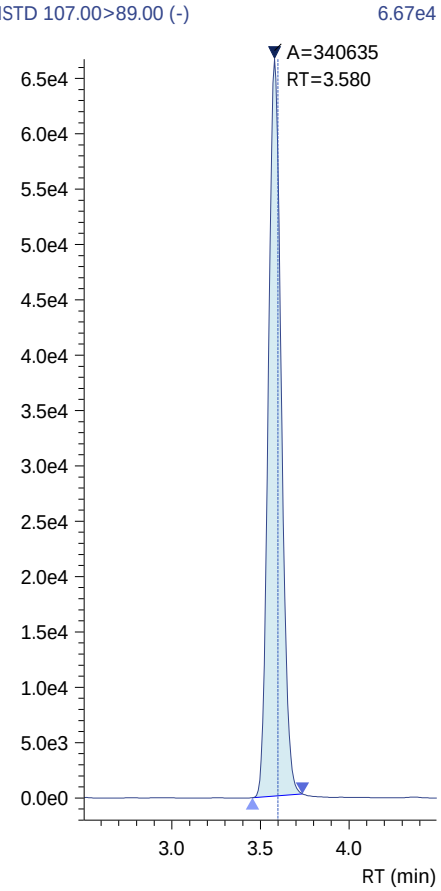
Conc 0.1019
R#1 31.26 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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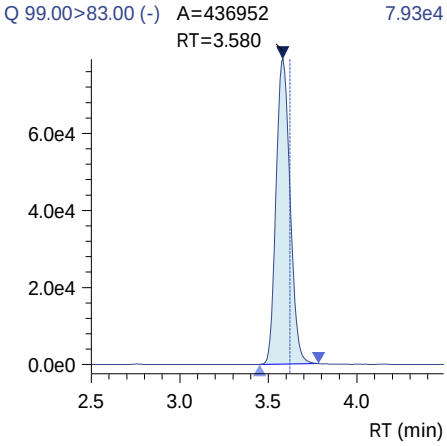
CCV

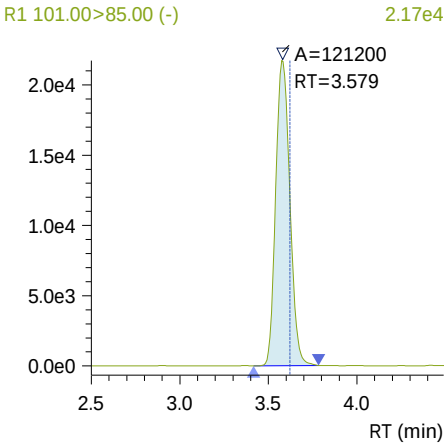
Sample ID: CCV
Date Acquired: 8/9/2023 11:25:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-015.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	436952	289217	10.2454	ng/mL	101.00 >85.00	27.74	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.577	289217	289217	1.0000	ng/mL	----	----	

Perchlorate

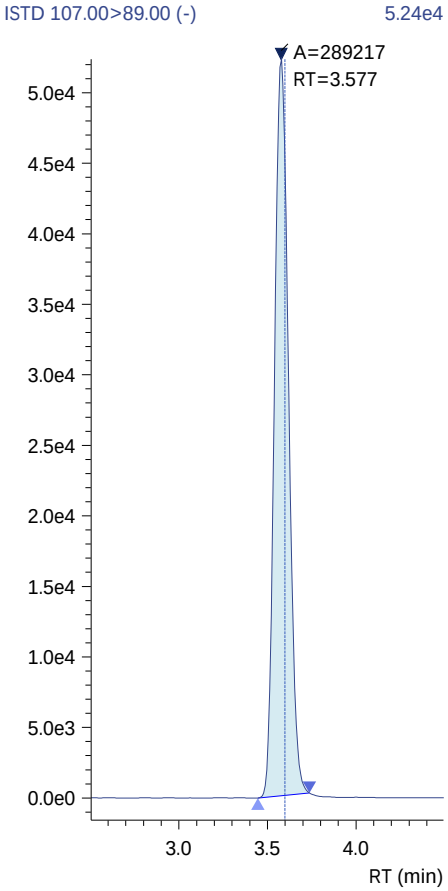
Conc 10.2454
R#1 27.74 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

CCV

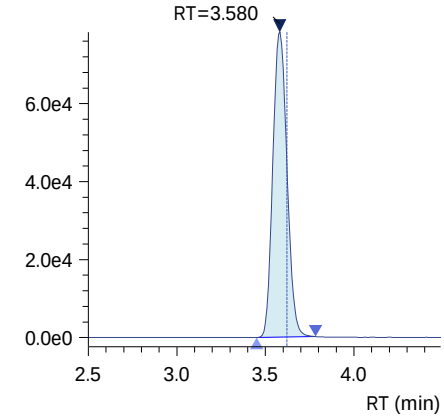
Sample ID: CCV
Date Acquired: 8/9/2023 12:26:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-026.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	436878	292242	10.13	ng/mL	101.00 >85.00	27.75	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.576	292242	292242	1.0000	ng/mL	----	----	

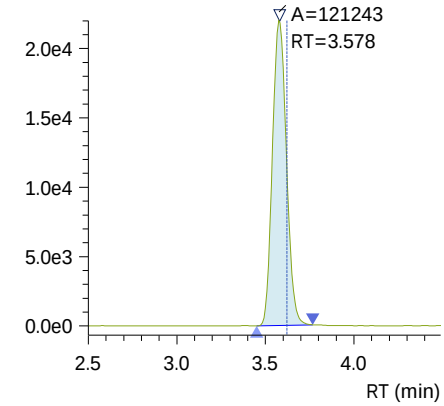
Perchlorate

Conc 10.1377
R#1 27.75 (27.74)

Q 99.00>83.00 (-) A=436878 RT=3.580 7.83e4



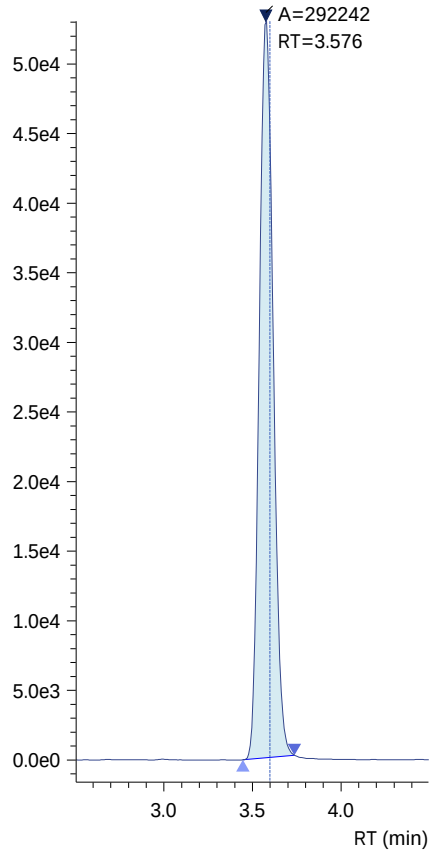
R1 101.00>85.00 (-) 2.20e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.31e4



Insight Report

Printed at 8/9/2023 1:55:45 PM

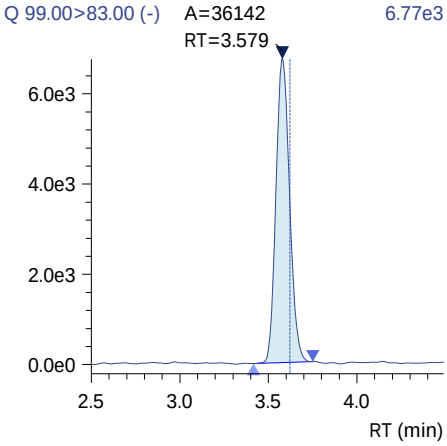
E2300718-001

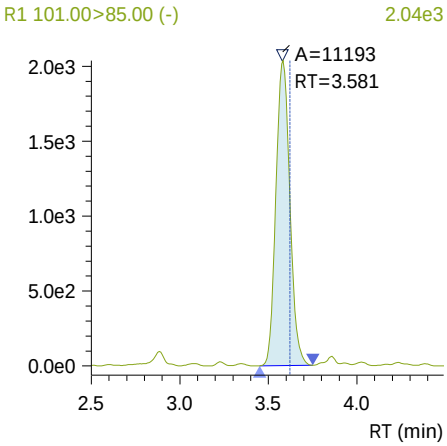
Sample ID: E2300718-001
Date Acquired: 8/9/2023 1:06:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-028.lcd
Vial: 45 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.579	36142	383878	0.6385	ng/mL	101.00 >85.00	30.97	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.577	3838 78	383878	1.0000	ng/mL	----	----	

Perchlorate

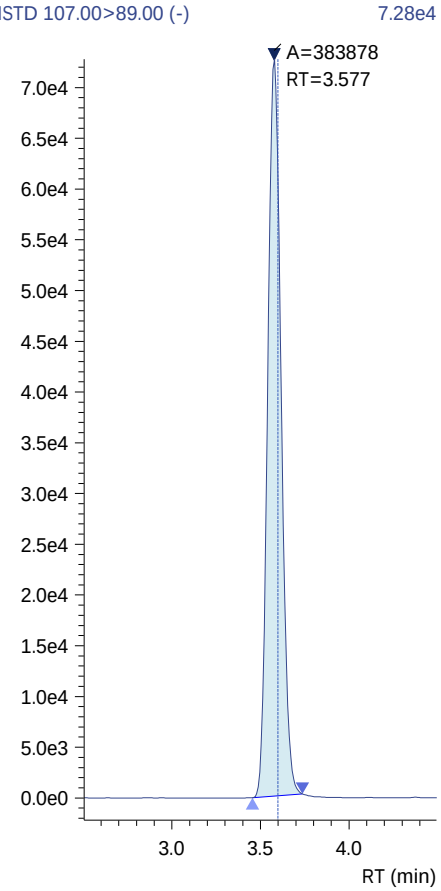
Conc 0.6385
R#1 30.97 (27.74)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

E2300718-002

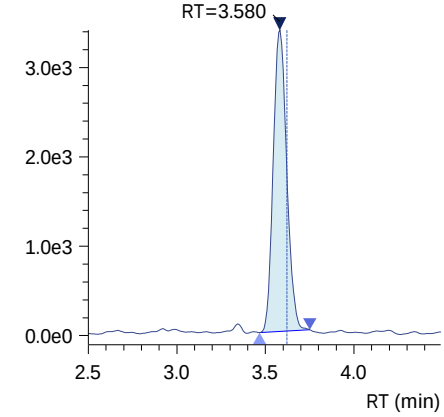
Sample ID: E2300718-002
Date Acquired: 8/9/2023 1:12:16 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-029.lcd
Vial: 46 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	17919	382294	0.3179	ng/mL	101.00 >85.00	27.96	19.41-36.06
Sodium Perchlorate-18O4 _IS	Auto	3.577	3822 94	382294	1.0000	ng/mL	----	----	

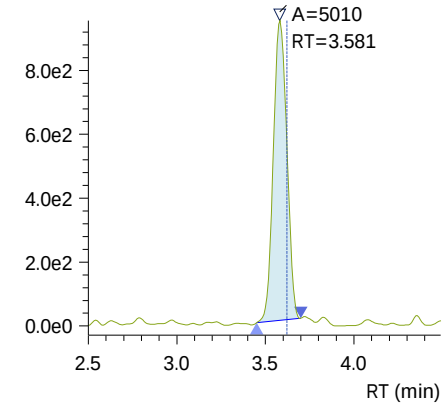
Perchlorate

Conc 0.3179
R#1 27.96 (27.74)

Q 99.00>83.00 (-) A=17919 RT=3.580 3.42e3



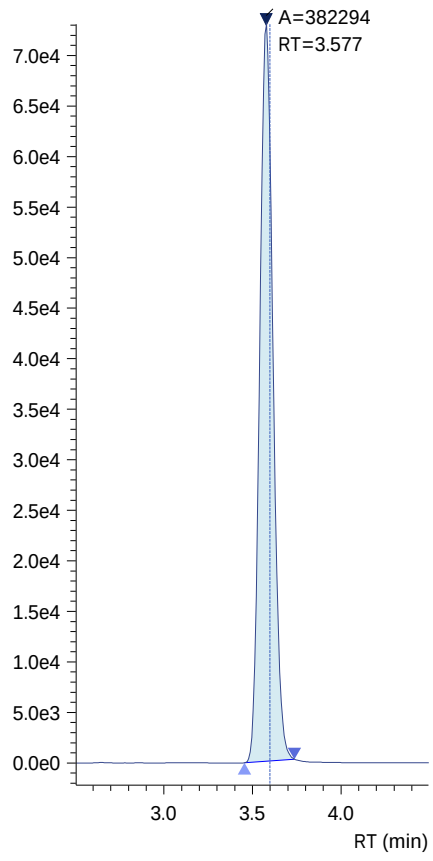
R1 101.00>85.00 (-) 9.56e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.31e4



Insight Report

Printed at 8/9/2023 1:55:45 PM

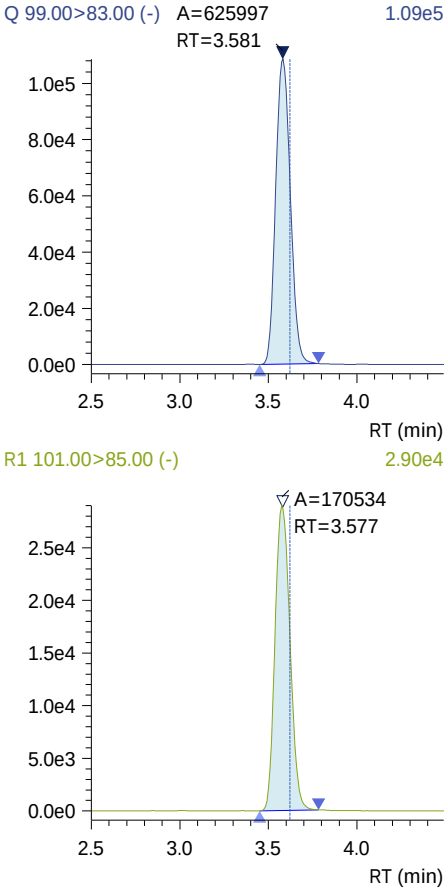
E2300718-003X10

Sample ID: E2300718-003
Date Acquired: 8/9/2023 1:29:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-030.lcd
Vial: 47 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.581	625997	270634	15.68	ng/mL	101.00	27.24	19.41-36.06
					59		>85.00		
Sodium Perchlorate-18O4_IS	Auto	3.575	270634	270634	1.0000	ng/mL	----	----	

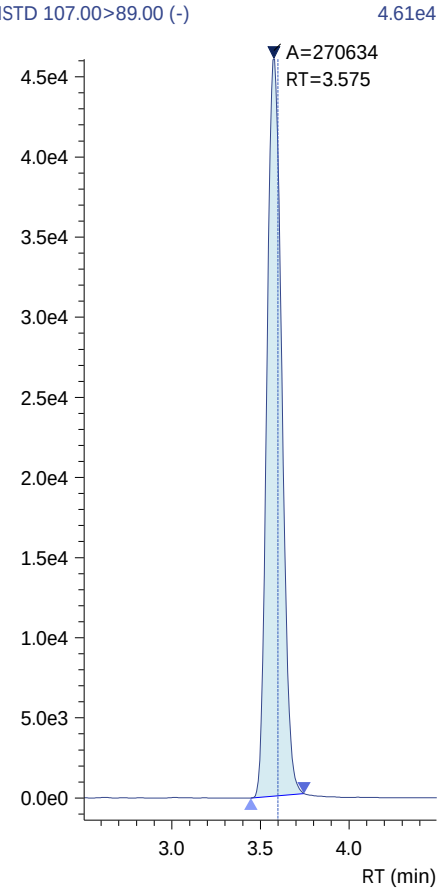
Perchlorate

Conc 15.6859
R#1 27.24 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/9/2023 1:55:45 PM

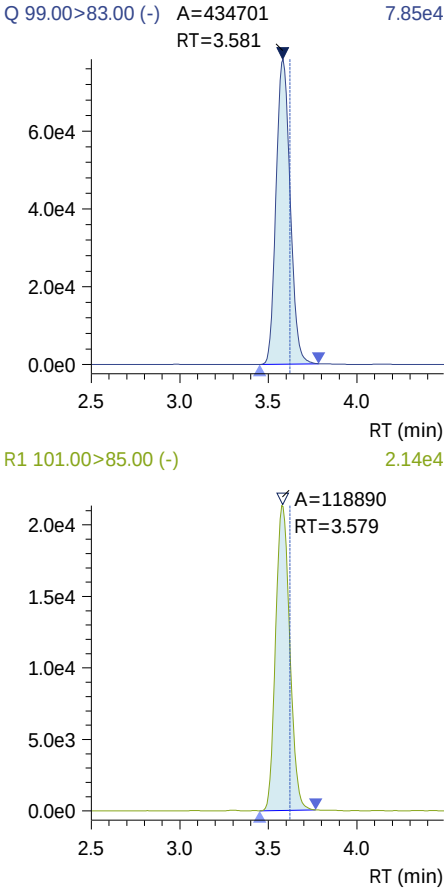
CCV

Sample ID: CCV
Date Acquired: 8/9/2023 1:38:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230808\2230808-031.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.581	434701	288788	10.2078	ng/mL	101.00 >85.00	27.35	19.41-36.06
Sodium Perchlorate-18O4_IS	Auto	3.577	288788	288788	1.0000	ng/mL	----	----	

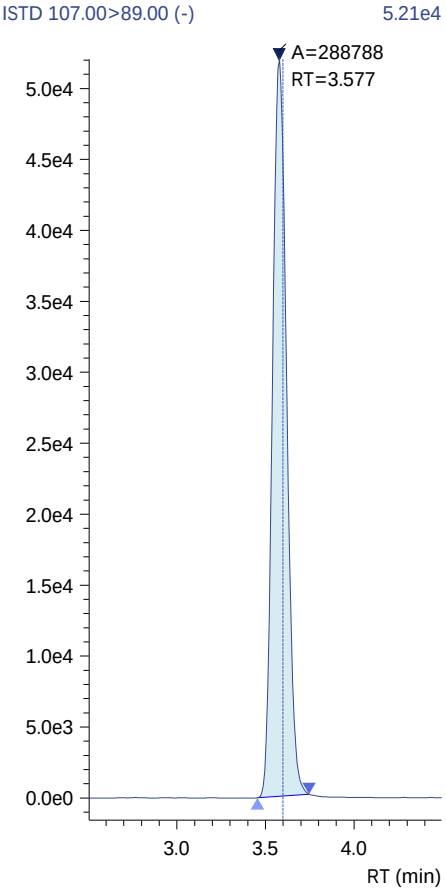
Perchlorate

Conc 10.2078
R#1 27.35 (27.74)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23080558 Longhorn GW Treatment Plant
BiWeekly Samples Cover Page

ALS WO# HS23080558

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Table of Contents

HS23080558 Longhorn GW Treatment Plant BiWeekly Samples Cover Page
- CoverPage
- HS23080558 Longhorn GW Treatment Plant BiWeekly Samples Final
  - CoverLetter
  - Sample Summary
  - CaseNarrative
  - LH18/24-SP650_080823
  - Trip Blank
  - Dates Report
  - QC
  - Acronyms
  - Certifications
  - SampleReceiptCheckList
  - COC
- HS23080558-MSVOA-SW8260
  - Form 1 - Sample Results
  - Form 2 - Surrogates
  - Form 3A - MS/MSD
  - Form 3B - LCS/LCSD
  - Form 4 - MB Assoc
  - Form 5 - Tune
  - Form 6 - ICAL

Table of Contents (continued)

Form 6I - ICV
Form 7 - CCV
Form 8 - ISTD
Run Log
Raw Data VOA6 443843
Raw Data VOA6 443844
HS23080558 Wetchem 9056_W
Sequence Overview
080823 ICAL
STD1
STD2
STD3
STD4
STD5
STD6
ICV
ICB
CCV
CCB
MBLK
LCS
HS23080210-01
HS23080210-01MS
HS23080210-01MSD
CCV1
CCB
CCV
CCB
HS23080558-01DF2
HS23080558-01DF50
CCV1
CCB

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alsglobal.com

WorkOrder: HS23080558

Longhorn GW Treatment Plant Bi-Weekly Samples

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

16-Aug-2023

HS23080558 Longhorn GW Treatment Plant BiWeekly Samples Final

ALS WO# HS23080558

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

August 18, 2023

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS23080558**

Laboratory Results for: **Longhorn GW Treatment Plant Bi-Weekly Samples**

Dear Marcia Olive,

ALS Environmental received 2 sample(s) on Aug 09, 2023 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
Work Order: HS23080558

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23080558-01	LH18/24-SP650_080823	Water		08-Aug-2023 13:00	09-Aug-2023 09:35	☐
HS23080558-02	Trip Blank	Water	CG-071023-03	08-Aug-2023 00:00	09-Aug-2023 09:35	☐

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
Work Order: HS23080558

GCMS Volatiles by Method SW8260

Batch ID: R443844

Sample ID: HS23080637-02MS

- MS and MSD are for an unrelated sample

WetChemistry by Method SW9056

Batch ID: R443894

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
Sample ID: LH18/24-SP650_080823
Collection Date: 08-Aug-2023 13:00

ANALYTICAL REPORT
WorkOrder:HS23080558
Lab ID:HS23080558-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,1,1-Trichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,1-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2-Dibromoethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
2,2-Dichloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2023 18:42
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
2-Hexanone	1.0	U	1.0	1.0	2.0	ug/L	1	11-Aug-2023 18:42
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
4-Methyl-2-pentanone	1.0	U	0.70	1.0	2.0	ug/L	1	11-Aug-2023 18:42
Acetone	1.0	U	0.40	1.0	2.0	ug/L	1	11-Aug-2023 18:42
Benzene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Bromochloromethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Bromodichloromethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Carbon disulfide	1.0	U	0.60	1.0	2.0	ug/L	1	11-Aug-2023 18:42
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Chloroform	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
ANALYTICAL REPORT
Project: Longhorn GW Treatment Plant Bi-Weekly Samples WorkOrder:HS23080558
Sample ID: LH18/24-SP650_080823 Lab ID:HS23080558-01
Collection Date: 08-Aug-2023 13:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
cis-1,2-Dichloroethene	**3.4**		**0.20**	**1.0**	**1.0**	**ug/L**	1	11-Aug-2023 18:42
cis-1,3-Dichloropropene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Dibromomethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
m,p-Xylene	2.0	U	0.50	2.0	2.0	ug/L	1	11-Aug-2023 18:42
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	11-Aug-2023 18:42
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:42
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Toluene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
trans-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
trans-1,3-Dichloropropene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:42
Surr: 1,2-Dichloroethane-d4	*107*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2023 18:42*
Surr: 4-Bromofluorobenzene	*92.1*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2023 18:42*
Surr: Dibromofluoromethane	*106*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2023 18:42*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2023 18:42*
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Chloride	**1,310**		**10.0**	**12.5**	**25.0**	**mg/L**	50	14-Aug-2023 10:10
Sulfate	**75.1**		**0.400**	**0.500**	**1.00**	**mg/L**	2	14-Aug-2023 10:05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc. **ANALYTICAL REPORT**
Project: Longhorn GW Treatment Plant Bi-Weekly Samples WorkOrder:HS23080558
Sample ID: Trip Blank Lab ID:HS23080558-02
Collection Date: 08-Aug-2023 00:00 Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,1,2-Tetrachloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,1,1-Trichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,1,2,2-Tetrachloroethane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,1-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,1-Dichloropropene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2,3-Trichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2,3-Trichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2,4-Trichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2,4-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2-Dibromo-3-chloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2-Dibromoethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2-Dichlorobenzene	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,2-Dichloropropane	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,3,5-Trimethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,3-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,3-Dichloropropane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
1,4-Dichlorobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
2,2-Dichloropropane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
2-Butanone	1.0	U	0.50	1.0	2.0	ug/L	1	11-Aug-2023 18:22
2-Chlorotoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
2-Hexanone	1.0	U	1.0	1.0	2.0	ug/L	1	11-Aug-2023 18:22
4-Chlorotoluene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
4-Isopropyltoluene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
4-Methyl-2-pentanone	1.0	U	0.70	1.0	2.0	ug/L	1	11-Aug-2023 18:22
Acetone	1.0	U	0.40	1.0	2.0	ug/L	1	11-Aug-2023 18:22
Benzene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Bromobenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Bromochloromethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Bromodichloromethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Bromoform	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Bromomethane	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Carbon disulfide	1.0	U	0.60	1.0	2.0	ug/L	1	11-Aug-2023 18:22
Carbon tetrachloride	1.0	U	0.50	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Chlorobenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Chloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Chloroform	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
ANALYTICAL REPORT
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder:HS23080558
Sample ID: Trip Blank
Lab ID:HS23080558-02
Collection Date: 08-Aug-2023 00:00
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
Chloromethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
cis-1,3-Dichloropropene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Dibromochloromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Dibromomethane	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Dichlorodifluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Ethylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Hexachlorobutadiene	1.0	U	1.0	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Isopropylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
m,p-Xylene	2.0	U	0.50	2.0	2.0	ug/L	1	11-Aug-2023 18:22
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	11-Aug-2023 18:22
n-Butylbenzene	1.0	U	0.40	1.0	1.0	ug/L	1	11-Aug-2023 18:22
n-Propylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Naphthalene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
o-Xylene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
sec-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Styrene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
tert-Butylbenzene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Tetrachloroethene	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Toluene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
trans-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
trans-1,3-Dichloropropene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Trichlorofluoromethane	1.0	U	0.30	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	11-Aug-2023 18:22
Surr: 1,2-Dichloroethane-d4	*104*			**0**	*81-118*	*%REC*	*1*	*11-Aug-2023 18:22*
Surr: 4-Bromofluorobenzene	*91.0*			**0**	*85-114*	*%REC*	*1*	*11-Aug-2023 18:22*
Surr: Dibromofluoromethane	*103*			**0**	*80-119*	*%REC*	*1*	*11-Aug-2023 18:22*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*11-Aug-2023 18:22*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R443844 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23080558-01	LH18/24-SP650_080823	08 Aug 2023 13:00			11 Aug 2023 18:42	1
HS23080558-02	Trip Blank	08 Aug 2023 00:00			11 Aug 2023 18:22	1
Batch ID: R443894 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Water	
HS23080558-01	LH18/24-SP650_080823	08 Aug 2023 13:00			14 Aug 2023 10:10	50
HS23080558-01	LH18/24-SP650_080823	08 Aug 2023 13:00			14 Aug 2023 10:05	2

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230811** Units: **ug/L** Analysis Date: **11-Aug-2023 17:41**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487575** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	1.0	1.0								U
1,1,1-Trichloroethane	1.0	1.0								U
1,1,2,2-Tetrachloroethane	1.0	1.0								U
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,1-Dichloropropene	1.0	1.0								U
1,2,3-Trichlorobenzene	1.0	1.0								U
1,2,3-Trichloropropane	1.0	1.0								U
1,2,4-Trichlorobenzene	1.0	1.0								U
1,2,4-Trimethylbenzene	1.0	1.0								U
1,2-Dibromo-3-chloropropane	1.0	1.0								U
1,2-Dibromoethane	1.0	1.0								U
1,2-Dichlorobenzene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
1,2-Dichloropropane	1.0	1.0								U
1,3,5-Trimethylbenzene	1.0	1.0								U
1,3-Dichlorobenzene	1.0	1.0								U
1,3-Dichloropropane	1.0	1.0								U
1,4-Dichlorobenzene	1.0	1.0								U
2,2-Dichloropropane	1.0	1.0								U
2-Butanone	1.0	2.0								U
2-Chlorotoluene	1.0	1.0								U
2-Hexanone	1.0	2.0								U
4-Chlorotoluene	1.0	1.0								U
4-Isopropyltoluene	1.0	1.0								U
4-Methyl-2-pentanone	1.0	2.0								U
Acetone	1.0	2.0								U
Benzene	1.0	1.0								U
Bromobenzene	1.0	1.0								U
Bromochloromethane	1.0	1.0								U
Bromodichloromethane	1.0	1.0								U
Bromoform	1.0	1.0								U
Bromomethane	1.0	1.0								U

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230811** Units: **ug/L** Analysis Date: **11-Aug-2023 17:41**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487575** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	1.0	2.0								U
Carbon tetrachloride	1.0	1.0								U
Chlorobenzene	1.0	1.0								U
Chloroethane	1.0	1.0								U
Chloroform	1.0	1.0								U
Chloromethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
cis-1,3-Dichloropropene	1.0	1.0								U
Dibromochloromethane	1.0	1.0								U
Dibromomethane	1.0	1.0								U
Dichlorodifluoromethane	1.0	1.0								U
Ethylbenzene	1.0	1.0								U
Hexachlorobutadiene	1.0	1.0								U
Isopropylbenzene	1.0	1.0								U
m,p-Xylene	2.0	2.0								U
Methylene chloride	1.0	2.0								U
Naphthalene	1.0	1.0								U
n-Butylbenzene	1.0	1.0								U
n-Propylbenzene	1.0	1.0								U
o-Xylene	1.0	1.0								U
sec-Butylbenzene	1.0	1.0								U
Styrene	1.0	1.0								U
tert-Butylbenzene	1.0	1.0								U
Tetrachloroethene	1.0	1.0								U
Toluene	1.0	1.0								U
trans-1,2-Dichloroethene	1.0	1.0								U
trans-1,3-Dichloropropene	1.0	1.0								U
Trichloroethene	1.0	1.0								U
Trichlorofluoromethane	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*52.72*	*1.0*	*50*	*0*	*105*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*43.04*	*1.0*	*50*	*0*	*86.1*	*85 - 114*				
Surr: Dibromofluoromethane	*52.24*	*1.0*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*51.37*	*1.0*	*50*	*0*	*103*	*89 - 112*				

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-230811** Units: **ug/L** Analysis Date: **11-Aug-2023 16:39**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487574** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	19.96	1.0	20	0	99.8	78 - 124				
1,1,1-Trichloroethane	21.69	1.0	20	0	108	74 - 131				
1,1,2,2-Tetrachloroethane	19.63	1.0	20	0	98.2	71 - 121				
1,1,2-Trichloroethane	20.15	1.0	20	0	101	80 - 119				
1,1-Dichloroethane	20.27	1.0	20	0	101	77 - 125				
1,1-Dichloroethene	20.17	1.0	20	0	101	71 - 131				
1,1-Dichloropropene	21.35	1.0	20	0	107	78 - 125				
1,2,3-Trichlorobenzene	19.04	1.0	20	0	95.2	69 - 129				
1,2,3-Trichloropropane	20.2	1.0	20	0	101	73 - 122				
1,2,4-Trichlorobenzene	19.83	1.0	20	0	99.1	69 - 130				
1,2,4-Trimethylbenzene	20.34	1.0	20	0	102	76 - 124				
1,2-Dibromo-3-chloropropane	20.1	1.0	20	0	101	62 - 128				
1,2-Dibromoethane	20.21	1.0	20	0	101	77 - 121				
1,2-Dichlorobenzene	20.17	1.0	20	0	101	80 - 119				
1,2-Dichloroethane	19.4	1.0	20	0	97.0	73 - 128				
1,2-Dichloropropane	20.33	1.0	20	0	102	78 - 122				
1,3,5-Trimethylbenzene	20.53	1.0	20	0	103	75 - 124				
1,3-Dichlorobenzene	20.26	1.0	20	0	101	80 - 119				
1,3-Dichloropropane	19.38	1.0	20	0	96.9	80 - 119				
1,4-Dichlorobenzene	20.45	1.0	20	0	102	79 - 118				
2,2-Dichloropropane	21.44	1.0	20	0	107	60 - 139				
2-Butanone	39.08	2.0	40	0	97.7	56 - 143				
2-Chlorotoluene	20.54	1.0	20	0	103	79 - 122				
2-Hexanone	39.64	2.0	40	0	99.1	57 - 139				
4-Chlorotoluene	20.66	1.0	20	0	103	78 - 122				
4-Isopropyltoluene	21.11	1.0	20	0	106	77 - 127				
4-Methyl-2-pentanone	39.27	2.0	40	0	98.2	67 - 130				
Acetone	43.3	2.0	40	0	108	39 - 160				
Benzene	20.13	1.0	20	0	101	79 - 120				
Bromobenzene	20.63	1.0	20	0	103	80 - 120				
Bromochloromethane	19.96	1.0	20	0	99.8	78 - 123				
Bromodichloromethane	19.79	1.0	20	0	98.9	79 - 125				
Bromoform	19.85	1.0	20	0	99.2	66 - 130				
Bromomethane	22.3	1.0	20	0	111	53 - 141				

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

LCS Sample ID: **VLCSW-230811** Units: **ug/L** Analysis Date: **11-Aug-2023 16:39**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487574** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	42.44	2.0	40	0	106	64 - 133				
Carbon tetrachloride	20.74	1.0	20	0	104	72 - 136				
Chlorobenzene	19.65	1.0	20	0	98.2	82 - 118				
Chloroethane	20.43	1.0	20	0	102	60 - 138				
Chloroform	20.13	1.0	20	0	101	79 - 124				
Chloromethane	22.71	1.0	20	0	114	50 - 139				
cis-1,2-Dichloroethene	20.82	1.0	20	0	104	78 - 123				
cis-1,3-Dichloropropene	19.63	1.0	20	0	98.2	75 - 124				
Dibromochloromethane	20.19	1.0	20	0	101	74 - 126				
Dibromomethane	19.49	1.0	20	0	97.5	79 - 123				
Dichlorodifluoromethane	22.16	1.0	20	0	111	32 - 152				
Ethylbenzene	20.58	1.0	20	0	103	79 - 121				
Hexachlorobutadiene	26.6	1.0	20	0	133	66 - 134				
Isopropylbenzene	20.66	1.0	20	0	103	72 - 131				
m,p-Xylene	41.22	2.0	40	0	103	80 - 121				
Methylene chloride	20.2	2.0	20	0	101	74 - 124				
Naphthalene	19.03	1.0	20	0	95.2	61 - 128				
n-Butylbenzene	20.4	1.0	20	0	102	75 - 128				
n-Propylbenzene	21.54	1.0	20	0	108	76 - 126				
o-Xylene	20.04	1.0	20	0	100	78 - 122				
sec-Butylbenzene	21.52	1.0	20	0	108	77 - 126				
Styrene	20.63	1.0	20	0	103	78 - 123				
tert-Butylbenzene	21.11	1.0	20	0	106	78 - 124				
Tetrachloroethene	21.14	1.0	20	0	106	74 - 129				
Toluene	19.88	1.0	20	0	99.4	80 - 121				
trans-1,2-Dichloroethene	20.07	1.0	20	0	100	75 - 124				
trans-1,3-Dichloropropene	19.18	1.0	20	0	95.9	73 - 127				
Trichloroethene	20.71	1.0	20	0	104	79 - 123				
Trichlorofluoromethane	21.55	1.0	20	0	108	65 - 141				
Vinyl chloride	21.09	1.0	20	0	105	58 - 137				
Surr: 1,2-Dichloroethane-d4	*53.44*	*1.0*	*50*	*0*	*107*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.85*	*1.0*	*50*	*0*	*97.7*	*85 - 114*				
Surr: Dibromofluoromethane	*52.49*	*1.0*	*50*	*0*	*105*	*80 - 119*				
Surr: Toluene-d8	*47.68*	*1.0*	*50*	*0*	*95.4*	*89 - 112*				

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23080637-02MS** Units: **ug/L** Analysis Date: **11-Aug-2023 21:06**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487585** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	22.21	1.0	20	0	111	78 - 124				
1,1,1-Trichloroethane	22.78	1.0	20	0	114	74 - 131				
1,1,2,2-Tetrachloroethane	22.85	1.0	20	0	114	71 - 121				
1,1,2-Trichloroethane	22.91	1.0	20	0	115	80 - 119				
1,1-Dichloroethane	20.33	1.0	20	0	102	77 - 125				
1,1-Dichloroethene	21.87	1.0	20	0	109	71 - 131				
1,1-Dichloropropene	24.47	1.0	20	0	122	78 - 125				
1,2,3-Trichlorobenzene	20.79	1.0	20	0	104	69 - 129				
1,2,3-Trichloropropane	22.93	1.0	20	0	115	73 - 122				
1,2,4-Trichlorobenzene	21.3	1.0	20	0	107	69 - 130				
1,2,4-Trimethylbenzene	22.89	1.0	20	0	114	76 - 124				
1,2-Dibromo-3-chloropropane	23.31	1.0	20	0	117	62 - 128				
1,2-Dibromoethane	22.51	1.0	20	0	113	77 - 121				
1,2-Dichlorobenzene	22.09	1.0	20	0	110	80 - 119				
1,2-Dichloroethane	21.14	1.0	20	0	106	73 - 128				
1,2-Dichloropropane	21.12	1.0	20	0	106	78 - 122				
1,3,5-Trimethylbenzene	23.51	1.0	20	0	118	75 - 124				
1,3-Dichlorobenzene	22.68	1.0	20	0	113	80 - 119				
1,3-Dichloropropane	22.08	1.0	20	0	110	80 - 119				
1,4-Dichlorobenzene	22.39	1.0	20	0	112	79 - 118				
2,2-Dichloropropane	20.61	1.0	20	0	103	60 - 139				
2-Butanone	38.99	2.0	40	0	97.5	56 - 143				
2-Chlorotoluene	22.97	1.0	20	0	115	79 - 122				
2-Hexanone	55.89	2.0	40	0	140	57 - 139				S
4-Chlorotoluene	22.96	1.0	20	0	115	78 - 122				
4-Isopropyltoluene	24.42	1.0	20	0	122	77 - 127				
4-Methyl-2-pentanone	53.08	2.0	40	0	133	67 - 130				S
Acetone	37.38	2.0	40	0	93.5	39 - 160				
Benzene	22.45	1.0	20	0	112	79 - 120				
Bromobenzene	22.62	1.0	20	0	113	80 - 120				
Bromochloromethane	20.37	1.0	20	0	102	78 - 123				
Bromodichloromethane	21.01	1.0	20	0	105	79 - 125				
Bromoform	21.65	1.0	20	0	108	66 - 130				
Bromomethane	20.42	1.0	20	0	102	53 - 141				

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23080637-02MS** Units: **ug/L** Analysis Date: **11-Aug-2023 21:06**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487585** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Carbon disulfide	45	2.0	40	0	112	64 - 133				
Carbon tetrachloride	23.54	1.0	20	0	118	72 - 136				
Chlorobenzene	21.85	1.0	20	0	109	82 - 118				
Chloroethane	22.05	1.0	20	0	110	60 - 138				
Chloroform	20.73	1.0	20	0	104	79 - 124				
Chloromethane	21	1.0	20	0	105	50 - 139				
cis-1,2-Dichloroethene	21.3	1.0	20	0	106	78 - 123				
cis-1,3-Dichloropropene	20.4	1.0	20	0	102	75 - 124				
Dibromochloromethane	22.01	1.0	20	0	110	74 - 126				
Dibromomethane	20.89	1.0	20	0	104	79 - 123				
Dichlorodifluoromethane	23.27	1.0	20	0	116	32 - 152				
Ethylbenzene	23.72	1.0	20	0	119	79 - 121				
Hexachlorobutadiene	29.51	1.0	20	0	148	66 - 134				S
Isopropylbenzene	24.1	1.0	20	0	120	72 - 131				
m,p-Xylene	46.67	2.0	40	0	117	80 - 121				
Methylene chloride	19.66	2.0	20	0	98.3	74 - 124				
Naphthalene	22.28	1.0	20	0	111	61 - 128				
n-Butylbenzene	22.97	1.0	20	0	115	75 - 128				
n-Propylbenzene	24.9	1.0	20	0	125	76 - 126				
o-Xylene	22.41	1.0	20	0	112	78 - 122				
sec-Butylbenzene	25.23	1.0	20	0	126	77 - 126				S
Styrene	22.81	1.0	20	0	114	78 - 123				
tert-Butylbenzene	24.72	1.0	20	0	124	78 - 124				
Tetrachloroethene	24.33	1.0	20	0	122	74 - 129				
Toluene	22.34	1.0	20	0	112	80 - 121				
trans-1,2-Dichloroethene	20.54	1.0	20	0	103	75 - 124				
trans-1,3-Dichloropropene	20.23	1.0	20	0	101	73 - 127				
Trichloroethene	22.57	1.0	20	0	113	79 - 123				
Trichlorofluoromethane	23.42	1.0	20	0	117	65 - 141				
Vinyl chloride	22.22	1.0	20	0	111	58 - 137				
Surr: 1,2-Dichloroethane-d4	*53.16*	*1.0*	*50*	*0*	*106*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.51*	*1.0*	*50*	*0*	*95.0*	*85 - 114*				
Surr: Dibromofluoromethane	*52.2*	*1.0*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*52.34*	*1.0*	*50*	*0*	*105*	*89 - 112*				

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23080637-02MSD** Units: **ug/L** Analysis Date: **11-Aug-2023 21:26**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487586** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
1,1,1,2-Tetrachloroethane	21.86	1.0	20	0	109	78 - 124	22.21	1.59	20	
1,1,1-Trichloroethane	22.47	1.0	20	0	112	74 - 131	22.78	1.34	20	
1,1,2,2-Tetrachloroethane	22.79	1.0	20	0	114	71 - 121	22.85	0.264	20	
1,1,2-Trichloroethane	22.33	1.0	20	0	112	80 - 119	22.91	2.56	20	
1,1-Dichloroethane	20.17	1.0	20	0	101	77 - 125	20.33	0.81	20	
1,1-Dichloroethene	21.68	1.0	20	0	108	71 - 131	21.87	0.889	20	
1,1-Dichloropropene	23.3	1.0	20	0	117	78 - 125	24.47	4.9	20	
1,2,3-Trichlorobenzene	21.4	1.0	20	0	107	69 - 129	20.79	2.87	20	
1,2,3-Trichloropropane	23.47	1.0	20	0	117	73 - 122	22.93	2.3	20	
1,2,4-Trichlorobenzene	21.74	1.0	20	0	109	69 - 130	21.3	2.04	20	
1,2,4-Trimethylbenzene	23.09	1.0	20	0	115	76 - 124	22.89	0.883	20	
1,2-Dibromo-3-chloropropane	23.14	1.0	20	0	116	62 - 128	23.31	0.751	20	
1,2-Dibromoethane	23.01	1.0	20	0	115	77 - 121	22.51	2.22	20	
1,2-Dichlorobenzene	22.09	1.0	20	0	110	80 - 119	22.09	0.0268	20	
1,2-Dichloroethane	21.78	1.0	20	0	109	73 - 128	21.14	2.98	20	
1,2-Dichloropropane	21.41	1.0	20	0	107	78 - 122	21.12	1.37	20	
1,3,5-Trimethylbenzene	23.39	1.0	20	0	117	75 - 124	23.51	0.518	20	
1,3-Dichlorobenzene	22.48	1.0	20	0	112	80 - 119	22.68	0.896	20	
1,3-Dichloropropane	22.17	1.0	20	0	111	80 - 119	22.08	0.403	20	
1,4-Dichlorobenzene	22.28	1.0	20	0	111	79 - 118	22.39	0.521	20	
2,2-Dichloropropane	20.15	1.0	20	0	101	60 - 139	20.61	2.28	20	
2-Butanone	43.35	2.0	40	0	108	56 - 143	38.99	10.6	20	
2-Chlorotoluene	23.4	1.0	20	0	117	79 - 122	22.97	1.86	20	
2-Hexanone	57.02	2.0	40	0	143	57 - 139	55.89	2.01	20	S
4-Chlorotoluene	23.4	1.0	20	0	117	78 - 122	22.96	1.91	20	
4-Isopropyltoluene	24.11	1.0	20	0	121	77 - 127	24.42	1.25	20	
4-Methyl-2-pentanone	54.09	2.0	40	0	135	67 - 130	53.08	1.87	20	S
Acetone	38.38	2.0	40	0	95.9	39 - 160	37.38	2.64	20	
Benzene	21.95	1.0	20	0	110	79 - 120	22.45	2.23	20	
Bromobenzene	22.54	1.0	20	0	113	80 - 120	22.62	0.358	20	
Bromochloromethane	20.59	1.0	20	0	103	78 - 123	20.37	1.08	20	
Bromodichloromethane	20.35	1.0	20	0	102	79 - 125	21.01	3.16	20	
Bromoform	22.29	1.0	20	0	111	66 - 130	21.65	2.91	20	
Bromomethane	20.66	1.0	20	0	103	53 - 141	20.42	1.16	20	

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443844 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23080637-02MSD** Units: **ug/L** Analysis Date: **11-Aug-2023 21:26**
Client ID: Run ID: **VOA6_443844** SeqNo: **7487586** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
Carbon disulfide	44.51	2.0	40	0	111	64 - 133	45	1.1	20	
Carbon tetrachloride	22.91	1.0	20	0	115	72 - 136	23.54	2.74	20	
Chlorobenzene	22.09	1.0	20	0	110	82 - 118	21.85	1.1	20	
Chloroethane	21.12	1.0	20	0	106	60 - 138	22.05	4.29	20	
Chloroform	20.58	1.0	20	0	103	79 - 124	20.73	0.748	20	
Chloromethane	21.45	1.0	20	0	107	50 - 139	21	2.11	20	
cis-1,2-Dichloroethene	21.09	1.0	20	0	105	78 - 123	21.3	0.978	20	
cis-1,3-Dichloropropene	20.62	1.0	20	0	103	75 - 124	20.4	1.09	20	
Dibromochloromethane	21.73	1.0	20	0	109	74 - 126	22.01	1.26	20	
Dibromomethane	20.94	1.0	20	0	105	79 - 123	20.89	0.236	20	
Dichlorodifluoromethane	22.6	1.0	20	0	113	32 - 152	23.27	2.9	20	
Ethylbenzene	23.4	1.0	20	0	117	79 - 121	23.72	1.4	20	
Hexachlorobutadiene	30.55	1.0	20	0	153	66 - 134	29.51	3.47	20	S
Isopropylbenzene	23.77	1.0	20	0	119	72 - 131	24.1	1.34	20	
m,p-Xylene	46.22	2.0	40	0	116	80 - 121	46.67	0.962	20	
Methylene chloride	19.69	2.0	20	0	98.5	74 - 124	19.66	0.147	20	
Naphthalene	23.06	1.0	20	0	115	61 - 128	22.28	3.45	20	
n-Butylbenzene	22.88	1.0	20	0	114	75 - 128	22.97	0.411	20	
n-Propylbenzene	24.84	1.0	20	0	124	76 - 126	24.9	0.244	20	
o-Xylene	22.15	1.0	20	0	111	78 - 122	22.41	1.15	20	
sec-Butylbenzene	25.43	1.0	20	0	127	77 - 126	25.23	0.798	20	S
Styrene	22.97	1.0	20	0	115	78 - 123	22.81	0.696	20	
tert-Butylbenzene	25.01	1.0	20	0	125	78 - 124	24.72	1.18	20	S
Tetrachloroethene	23.75	1.0	20	0	119	74 - 129	24.33	2.41	20	
Toluene	22.37	1.0	20	0	112	80 - 121	22.34	0.162	20	
trans-1,2-Dichloroethene	20.57	1.0	20	0	103	75 - 124	20.54	0.136	20	
trans-1,3-Dichloropropene	20.31	1.0	20	0	102	73 - 127	20.23	0.434	20	
Trichloroethene	21.99	1.0	20	0	110	79 - 123	22.57	2.62	20	
Trichlorofluoromethane	23.34	1.0	20	0	117	65 - 141	23.42	0.326	20	
Vinyl chloride	22.22	1.0	20	0	111	58 - 137	22.22	0.022	20	
Surr: 1,2-Dichloroethane-d4	*53.69*	*1.0*	*50*	*0*	*107*	*81 - 118*	*53.16*	*1.01*	*20*	
Surr: 4-Bromofluorobenzene	*46.44*	*1.0*	*50*	*0*	*92.9*	*85 - 114*	*47.51*	*2.27*	*20*	
Surr: Dibromofluoromethane	*52.74*	*1.0*	*50*	*0*	*105*	*80 - 119*	*52.2*	*1.04*	*20*	
Surr: Toluene-d8	*52.33*	*1.0*	*50*	*0*	*105*	*89 - 112*	*52.34*	*0.0136*	*20*	

ALS Houston, US Date: 18-Aug-23

Client:	Bhate Environmental Associates, Inc.
Project:	Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder:	HS23080558

QC BATCH REPORT

Batch ID:	**R443844 (0)**	**Instrument:**	**VOA6**	**Method:**	**VOLATILES ORGANICS BY METHOD 8260C**

The following samples were analyzed in this batch: HS23080558-01 HS23080558-02

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: HS23080558

QC BATCH REPORT

Batch ID: R443894 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **14-Aug-2023 06:48**
Client ID: Run ID: **ICS-Integrion_443894** SeqNo: **7488554** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	0.250	0.500								U
Sulfate	0.250	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **14-Aug-2023 06:59**
Client ID: Run ID: **ICS-Integrion_443894** SeqNo: **7488555** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.93	0.500	20	0	99.6	80 - 120				
Sulfate	20.3	0.500	20	0	101	80 - 120				

MS Sample ID: **HS23080210-01MS** Units: **mg/L** Analysis Date: **14-Aug-2023 07:11**
Client ID: Run ID: **ICS-Integrion_443894** SeqNo: **7488557** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	17.73	0.500	10	7.588	101	80 - 120				
Sulfate	129.5	0.500	10	119.5	100	80 - 120				EO

MSD Sample ID: **HS23080210-01MSD** Units: **mg/L** Analysis Date: **14-Aug-2023 07:17**
Client ID: Run ID: **ICS-Integrion_443894** SeqNo: **7488558** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	17.85	0.500	10	7.588	103	80 - 120	17.73	0.674	20	
Sulfate	130.4	0.500	10	119.5	109	80 - 120	129.5	0.671	20	EO

The following samples were analyzed in this batch: HS23080558-01

ALS Houston, US Date: 18-Aug-23

Client: Bhate Environmental Associates, Inc.
Project: Longhorn GW Treatment Plant Bi-Weekly Samples
WorkOrder: **HS23080558**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 18-Aug-23

Sample Receipt Checklist

Work Order ID: HS23080558 **Date/Time Received:** 09-Aug-2023 09:35

Client Name: Bhate Environmental **Received by:** Corey Grandits

Completed By: /S/ Paresh M. Giga (eSignature) 09-Aug-2023 11:17 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: **Water** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:none
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.2C/1.1C U/C	IR31	
Cooler(s)/Kit(s):	48583		
Date/Time sample(s) sent to storage:	8/9/23 11:20		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210, Houston, Tx. 77099 ATTN: Dane Wacasey

Project: BHATE
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. JVPCIBH.0001

Job:
GROUNDWATER TREATMENT PLANT
BI-WEEKLY SAMPLES

Prepared By: Scott Beesinger

P.O Number

HS23080558

Bhate Environmental Associates, Inc.
Longhorn GW Treatment Plant Bi-Weekly Samples

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	Analyses: VOC	Analyses: CHLORIDE, SULFATE	Remarks (Preservatives, etc.)	Lab I.D.#
LH18/24-SP650_080823	Water	08/08/23 / 13:00		3	3		HCL	
LH18/24-SP650_080823	Water	08/08/23 / 13:00		1		1	NONE	
Trip Blank	Water	08/08/23		2	2		HCL	

Additional Remarks: **Standard TAT on all parameters**

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	08/08/23	13:30		8.9.23	0935						

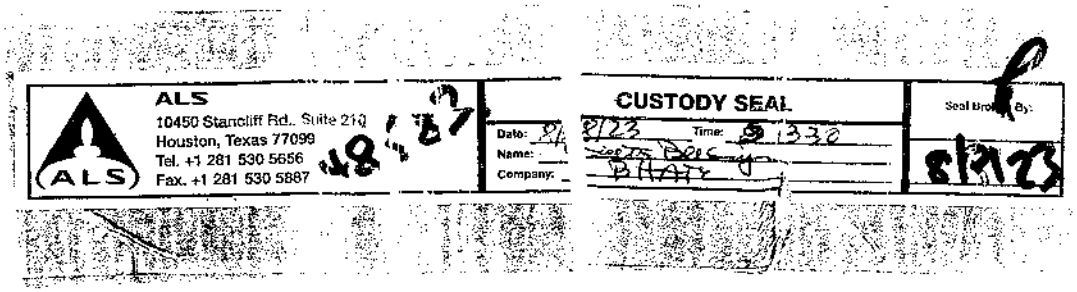
For Lab Use Only

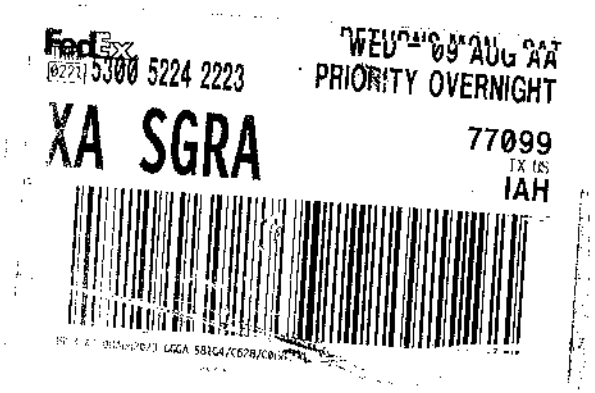
Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks

48983 1.2°

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
CUSTODY SEAL
Seal Broken By:
8/23


FedEx
5300 5224 2223
WED - 09 AUG AA
PRIORITY OVERNIGHT
XA SGRA
77099
TX US
IAH

HS23080558-MSVOA-SW8260

ALS WO# HS23080558

01249673

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

HS23080558-01	Collected	Received	Matrix	Basis
LH18/24-SP650_080823	08/08/23 13:00	08/09/23 09:35	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,1,2-Tetrachloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,1,1-Trichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,1,2,2-Tetrachloroethane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,1-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,1-Dichloropropene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2,3-Trichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2,3-Trichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2,4-Trichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2,4-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2-Dibromo-3-chloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2-Dibromoethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2-Dichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,2-Dichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,3,5-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,3-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,3-Dichloropropane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
1,4-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
2,2-Dichloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
2-Butanone	ug/L	2.0	U	0.50	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
2-Chlorotoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
2-Hexanone	ug/L	2.0	U	1.0	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
4-Chlorotoluene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
4-Isopropyltoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
4-Methyl-2-pentanone	ug/L	2.0	U	0.70	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Acetone	ug/L	2.0	U	0.40	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Benzene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Bromobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Bromochloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Bromodichloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Bromoform	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

HS23080558-01	Collected	Received	Matrix	Basis
LH18/24-SP650_080823	08/08/23 13:00	08/09/23 09:35	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Bromomethane	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Carbon disulfide	ug/L	2.0	U	0.60	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Carbon tetrachloride	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Chlorobenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Chloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Chloroform	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Chloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
cis-1,2-Dichloroethene	ug/L	3.4		0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
cis-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Dibromochloromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Dibromomethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Dichlorodifluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Ethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Hexachlorobutadiene	ug/L	1.0	U	1.0	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Isopropylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
m,p-Xylene	ug/L	2.0	U	0.50	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Naphthalene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
n-Butylbenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
n-Propylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
o-Xylene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
sec-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Styrene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
tert-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Tetrachloroethene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Toluene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
trans-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
trans-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Trichlorofluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:42	VOA6_443844	X081122.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

HS23080558-02

Trip Blank

Collected	Received	Matrix	Basis
08/08/23 00:00	08/09/23 09:35	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,1,2-Tetrachloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,1,1-Trichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,1,2,2-Tetrachloroethane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,1-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,1-Dichloropropene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2,3-Trichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2,3-Trichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2,4-Trichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2,4-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2-Dibromo-3-chloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2-Dibromoethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2-Dichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,2-Dichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,3,5-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,3-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,3-Dichloropropane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
1,4-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
2,2-Dichloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
2-Butanone	ug/L	2.0	U	0.50	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
2-Chlorotoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
2-Hexanone	ug/L	2.0	U	1.0	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
4-Chlorotoluene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
4-Isopropyltoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
4-Methyl-2-pentanone	ug/L	2.0	U	0.70	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Acetone	ug/L	2.0	U	0.40	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Benzene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Bromobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Bromochloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Bromodichloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Bromoform	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

HS23080558-02

Trip Blank

Collected	Received	Matrix	Basis
08/08/23 00:00	08/09/23 09:35	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Bromomethane	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Carbon disulfide	ug/L	2.0	U	0.60	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Carbon tetrachloride	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Chlorobenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Chloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Chloroform	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Chloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
cis-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Dibromochloromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Dibromomethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Dichlorodifluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Ethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Hexachlorobutadiene	ug/L	1.0	U	1.0	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Isopropylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
m,p-Xylene	ug/L	2.0	U	0.50	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Naphthalene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
n-Butylbenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
n-Propylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
o-Xylene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
sec-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Styrene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
tert-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Tetrachloroethene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Toluene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
trans-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
trans-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Trichlorofluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 18:22	VOA6_443844	X081121.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

VBLKW-230811	Collected	Received	Matrix	Basis
VBLKW-230811	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,1,2-Tetrachloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,1,1-Trichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,1,2,2-Tetrachloroethane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,1-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,1-Dichloropropene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2,3-Trichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2,3-Trichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2,4-Trichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2,4-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2-Dibromo-3-chloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2-Dibromoethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2-Dichlorobenzene	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,2-Dichloropropane	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,3,5-Trimethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,3-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,3-Dichloropropane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
1,4-Dichlorobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
2,2-Dichloropropane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
2-Butanone	ug/L	2.0	U	0.50	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
2-Chlorotoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
2-Hexanone	ug/L	2.0	U	1.0	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
4-Chlorotoluene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
4-Isopropyltoluene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
4-Methyl-2-pentanone	ug/L	2.0	U	0.70	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Acetone	ug/L	2.0	U	0.40	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Benzene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Bromobenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Bromochloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Bromodichloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Bromoform	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

VBLKW-230811	Collected	Received	Matrix	Basis
VBLKW-230811	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Bromomethane	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Carbon disulfide	ug/L	2.0	U	0.60	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Carbon tetrachloride	ug/L	1.0	U	0.50	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Chlorobenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Chloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Chloroform	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Chloromethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
cis-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Dibromochloromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Dibromomethane	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Dichlorodifluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Ethylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Hexachlorobutadiene	ug/L	1.0	U	1.0	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Isopropylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
m,p-Xylene	ug/L	2.0	U	0.50	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Naphthalene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
n-Butylbenzene	ug/L	1.0	U	0.40	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
n-Propylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
o-Xylene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
sec-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Styrene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
tert-Butylbenzene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Tetrachloroethene	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Toluene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
trans-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
trans-1,3-Dichloropropene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Trichlorofluoromethane	ug/L	1.0	U	0.30	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	08/11/23 17:41	VOA6_443844	X081119.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 2 - System Monitoring Compound Recovery

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Bi-Weekly Samples	HS23080558	

RunID

Volatiles by EPA 8260

VOA6-443844

HS23080558-01	Analyzed	Conc Units	Dilution
LH18/24-SP650_080823	08/11/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54	50	107		81-118
4-Bromofluorobenzene	46	50	92.1		85-114
Dibromofluoromethane	53	50	106		80-119
Toluene-d8	53	50	106		89-112

HS23080558-02	Analyzed	Conc Units	Dilution
Trip Blank	08/11/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52	50	104		81-118
4-Bromofluorobenzene	45	50	91.0		85-114
Dibromofluoromethane	51	50	103		80-119
Toluene-d8	52	50	104		89-112

HS23080637-02MS	Analyzed	Conc Units	Dilution
BatchQC	08/11/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.16	50	106		81-118
4-Bromofluorobenzene	47.51	50	95.0		85-114
Dibromofluoromethane	52.2	50	104		80-119
Toluene-d8	52.34	50	105		89-112

Form 2 - System Monitoring Compound Recovery

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Bi-Weekly Samples	HS23080558	

RunID

Volatiles by EPA 8260

VOA6-443844

HS23080637-02MSD	Analyzed	Conc Units	Dilution
BatchQC	08/11/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.69	50	107		81-118
4-Bromofluorobenzene	46.44	50	92.9		85-114
Dibromofluoromethane	52.74	50	105		80-119
Toluene-d8	52.33	50	105		89-112

VBLKW-230811	Analyzed	Conc Units	Dilution
VBLKW-230811	08/11/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.72	50	105		81-118
4-Bromofluorobenzene	43.04	50	86.1		85-114
Dibromofluoromethane	52.24	50	104		80-119
Toluene-d8	51.37	50	103		89-112

VLCSW-230811	Analyzed	Conc Units	Dilution
VLCSW-230811	08/11/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.44	50	107		81-118
4-Bromofluorobenzene	48.85	50	97.7		85-114
Dibromofluoromethane	52.49	50	105		80-119
Toluene-d8	47.68	50	95.4		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

RunID VOA6-443844

Volatiles by EPA 8260

BatchQC (HS23080637-02)				HS23080637-02MS				HS23080637-02MSD						
Sample Matrix: Aqueous			Run Date	08/11/23				08/11/23						
Result Units: ug/L			Run Time	21:06				21:26						
			Data File	X081129.D				X081130.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,1,2-Tetrachloroethane	78-124	1	0	22.21	20	111		21.86	20	109		20	1.59	
1,1,1-Trichloroethane	74-131	1	0	22.78	20	114		22.47	20	112		20	1.34	
1,1,2,2-Tetrachloroethane	71-121	1	0	22.85	20	114		22.79	20	114		20	0.264	
1,1,2-Trichloroethane	80-119	1	0	22.91	20	115		22.33	20	112		20	2.56	
1,1-Dichloroethane	77-125	1	0	20.33	20	102		20.17	20	101		20	0.81	
1,1-Dichloroethene	71-131	1	0	21.87	20	109		21.68	20	108		20	0.889	
1,1-Dichloropropene	78-125	1	0	24.47	20	122		23.3	20	117		20	4.9	
1,2,3-Trichlorobenzene	69-129	1	0	20.79	20	104		21.4	20	107		20	2.87	
1,2,3-Trichloropropane	73-122	1	0	22.93	20	115		23.47	20	117		20	2.3	
1,2,4-Trichlorobenzene	69-130	1	0	21.3	20	107		21.74	20	109		20	2.04	
1,2,4-Trimethylbenzene	76-124	1	0	22.89	20	114		23.09	20	115		20	0.883	
1,2-Dibromo-3-chloropropane	62-128	1	0	23.31	20	117		23.14	20	116		20	0.751	
1,2-Dibromoethane	77-121	1	0	22.51	20	113		23.01	20	115		20	2.22	
1,2-Dichlorobenzene	80-119	1	0	22.09	20	110		22.09	20	110		20	0.0268	
1,2-Dichloroethane	73-128	1	0	21.14	20	106		21.78	20	109		20	2.98	
1,2-Dichloropropane	78-122	1	0	21.12	20	106		21.41	20	107		20	1.37	
1,3,5-Trimethylbenzene	75-124	1	0	23.51	20	118		23.39	20	117		20	0.518	
1,3-Dichlorobenzene	80-119	1	0	22.68	20	113		22.48	20	112		20	0.896	
1,3-Dichloropropane	80-119	1	0	22.08	20	110		22.17	20	111		20	0.403	
1,4-Dichlorobenzene	79-118	1	0	22.39	20	112		22.28	20	111		20	0.521	
2,2-Dichloropropane	60-139	1	0	20.61	20	103		20.15	20	101		20	2.28	
2-Butanone	56-143	1	0	38.99	40	98		43.35	40	108		20	10.6	
2-Chlorotoluene	79-122	1	0	22.97	20	115		23.4	20	117		20	1.86	
2-Hexanone	57-139	1	0	55.89	40	140		57.02	40	143		20	2.01	
4-Chlorotoluene	78-122	1	0	22.96	20	115		23.4	20	117		20	1.91	
4-Isopropyltoluene	77-127	1	0	24.42	20	122		24.11	20	121		20	1.25	
4-Methyl-2-pentanone	67-130	1	0	53.08	40	133		54.09	40	135		20	1.87	
Acetone	39-160	1	0	37.38	40	94		38.38	40	96		20	2.64	
Benzene	79-120	1	0	22.45	20	112		21.95	20	110		20	2.23	
Bromobenzene	80-120	1	0	22.62	20	113		22.54	20	113		20	0.358	
Bromochloromethane	78-123	1	0	20.37	20	102		20.59	20	103		20	1.08	
Bromodichloromethane	79-125	1	0	21.01	20	105		20.35	20	102		20	3.16	
Bromoform	66-130	1	0	21.65	20	108		22.29	20	111		20	2.91	
Bromomethane	53-141	1	0	20.42	20	102		20.66	20	103		20	1.16	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

RunID VOA6-443844

Volatiles by EPA 8260

BatchQC (HS23080637-02)				HS23080637-02MS				HS23080637-02MSD						
Sample Matrix Aqueous			**Run Date**	08/11/23				08/11/23						
Result Units ug/L			**Run Time**	21:06				21:26						
			Data File	X081129.D				X081130.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Carbon disulfide	64-133	1	0	45	40	112		44.51	40	111		20	1.1	
Carbon tetrachloride	72-136	1	0	23.54	20	118		22.91	20	115		20	2.74	
Chlorobenzene	82-118	1	0	21.85	20	109		22.09	20	110		20	1.1	
Chloroethane	60-138	1	0	22.05	20	110		21.12	20	106		20	4.29	
Chloroform	79-124	1	0	20.73	20	104		20.58	20	103		20	0.748	
Chloromethane	50-139	1	0	21	20	105		21.45	20	107		20	2.11	
cis-1,2-Dichloroethene	78-123	1	0	21.3	20	106		21.09	20	105		20	0.978	
cis-1,3-Dichloropropene	75-124	1	0	20.4	20	102		20.62	20	103		20	1.09	
Dibromochloromethane	74-126	1	0	22.01	20	110		21.73	20	109		20	1.26	
Dibromomethane	79-123	1	0	20.89	20	104		20.94	20	105		20	0.236	
Dichlorodifluoromethane	32-152	1	0	23.27	20	116		22.6	20	113		20	2.9	
Ethylbenzene	79-121	1	0	23.72	20	119		23.4	20	117		20	1.4	
Hexachlorobutadiene	66-134	1	0	29.51	20	148		30.55	20	153		20	3.47	
Isopropylbenzene	72-131	1	0	24.1	20	120		23.77	20	119		20	1.34	
m,p-Xylene	80-121	1	0	46.67	40	117		46.22	40	116		20	0.962	
Methylene chloride	74-124	1	0	19.66	20	98		19.69	20	98		20	0.147	
Naphthalene	61-128	1	0	22.28	20	111		23.06	20	115		20	3.45	
n-Butylbenzene	75-128	1	0	22.97	20	115		22.88	20	114		20	0.411	
n-Propylbenzene	76-126	1	0	24.9	20	125		24.84	20	124		20	0.244	
o-Xylene	78-122	1	0	22.41	20	112		22.15	20	111		20	1.15	
sec-Butylbenzene	77-126	1	0	25.23	20	126		25.43	20	127		20	0.798	
Styrene	78-123	1	0	22.81	20	114		22.97	20	115		20	0.696	
tert-Butylbenzene	78-124	1	0	24.72	20	124		25.01	20	125		20	1.18	
Tetrachloroethene	74-129	1	0	24.33	20	122		23.75	20	119		20	2.41	
Toluene	80-121	1	0	22.34	20	112		22.37	20	112		20	0.162	
trans-1,2-Dichloroethene	75-124	1	0	20.54	20	103		20.57	20	103		20	0.136	
trans-1,3-Dichloropropene	73-127	1	0	20.23	20	101		20.31	20	102		20	0.434	
Trichloroethene	79-123	1	0	22.57	20	113		21.99	20	110		20	2.62	
Trichlorofluoromethane	65-141	1	0	23.42	20	117		23.34	20	117		20	0.326	
Vinyl chloride	58-137	1	0	22.22	20	111		22.22	20	111		20	0.022	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 3B

Laboratory Control Sample Recovery

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

SAMPLENUM VLCSW-230811

Volatiles by EPA 8260

VOA6_443844			VLCSW-230811			
Spike Matrix	Aqueous	**Run Date**	08/11/23			
Result Units	ug/L	**Run Time**	16:39			
		Data File	X081116.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,1,2-Tetrachloroethane	78-124	20	19.96	100		
1,1,1-Trichloroethane	74-131	20	21.69	108		
1,1,2,2-Tetrachloroethane	71-121	20	19.63	98		
1,1,2-Trichloroethane	80-119	20	20.15	101		
1,1-Dichloroethane	77-125	20	20.27	101		
1,1-Dichloroethene	71-131	20	20.17	101		
1,1-Dichloropropene	78-125	20	21.35	107		
1,2,3-Trichlorobenzene	69-129	20	19.04	95		
1,2,3-Trichloropropane	73-122	20	20.2	101		
1,2,4-Trichlorobenzene	69-130	20	19.83	99		
1,2,4-Trimethylbenzene	76-124	20	20.34	102		
1,2-Dibromo-3-chloropropane	62-128	20	20.1	101		
1,2-Dibromoethane	77-121	20	20.21	101		
1,2-Dichlorobenzene	80-119	20	20.17	101		
1,2-Dichloroethane	73-128	20	19.4	97		
1,2-Dichloropropane	78-122	20	20.33	102		
1,3,5-Trimethylbenzene	75-124	20	20.53	103		
1,3-Dichlorobenzene	80-119	20	20.26	101		
1,3-Dichloropropane	80-119	20	19.38	97		
1,4-Dichlorobenzene	79-118	20	20.45	102		
2,2-Dichloropropane	60-139	20	21.44	107		
2-Butanone	56-143	40	39.08	98		
2-Chlorotoluene	79-122	20	20.54	103		
2-Hexanone	57-139	40	39.64	99		
4-Chlorotoluene	78-122	20	20.66	103		
4-Isopropyltoluene	77-127	20	21.11	106		
4-Methyl-2-pentanone	67-130	40	39.27	98		
Acetone	39-160	40	43.3	108		
Benzene	79-120	20	20.13	101		
Bromobenzene	80-120	20	20.63	103		
Bromochloromethane	78-123	20	19.96	100		
Bromodichloromethane	79-125	20	19.79	99		
Bromoform	66-130	20	19.85	99		
Bromomethane	53-141	20	22.3	111		

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

SAMPLENUM VLCSW-230811

Volatiles by EPA 8260

VOA6_443844			VLCSW-230811			
Spike Matrix	Aqueous	**Run Date**	08/11/23			
Result Units	ug/L	**Run Time**	16:39			
		Data File	X081116.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
Carbon disulfide	64-133	40	42.44	106		
Carbon tetrachloride	72-136	20	20.74	104		
Chlorobenzene	82-118	20	19.65	98		
Chloroethane	60-138	20	20.43	102		
Chloroform	79-124	20	20.13	101		
Chloromethane	50-139	20	22.71	114		
cis-1,2-Dichloroethene	78-123	20	20.82	104		
cis-1,3-Dichloropropene	75-124	20	19.63	98		
Dibromochloromethane	74-126	20	20.19	101		
Dibromomethane	79-123	20	19.49	98		
Dichlorodifluoromethane	32-152	20	22.16	111		
Ethylbenzene	79-121	20	20.58	103		
Hexachlorobutadiene	66-134	20	26.6	133		
Isopropylbenzene	72-131	20	20.66	103		
m,p-Xylene	80-121	40	41.22	103		
Methylene chloride	74-124	20	20.2	101		
Naphthalene	61-128	20	19.03	95		
n-Butylbenzene	75-128	20	20.4	102		
n-Propylbenzene	76-126	20	21.54	108		
o-Xylene	78-122	20	20.04	100		
sec-Butylbenzene	77-126	20	21.52	108		
Styrene	78-123	20	20.63	103		
tert-Butylbenzene	78-124	20	21.11	106		
Tetrachloroethene	74-129	20	21.14	106		
Toluene	80-121	20	19.88	99		
trans-1,2-Dichloroethene	75-124	20	20.07	100		
trans-1,3-Dichloropropene	73-127	20	19.18	96		
Trichloroethene	79-123	20	20.71	104		
Trichlorofluoromethane	65-141	20	21.55	108		
Vinyl chloride	58-137	20	21.09	105		

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 4

Method Blank Summary

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
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Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230811	X081119.D	08/11/23 17:41	VOA6_443844
VLCSW-230811	LCS	VLCSW-230811	X081116.D	08/11/23 16:39	VOA6_443844
Trip Blank	SAMP	HS23080558-02	X081121.D	08/11/23 18:22	VOA6_443844
LH18/24-SP650_080823	SAMP	HS23080558-01	X081122.D	08/11/23 18:42	VOA6_443844
BatchQC	MS	HS23080637-02MS	X081129.D	08/11/23 21:06	VOA6_443844
BatchQC	MSD	HS23080637-02MSD	X081130.D	08/11/23 21:26	VOA6_443844

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Form 5

Instrument Performance Check

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
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www.alsglobal.com

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

RunID VOA6-443843

Volatiles by EPA 8260

Tune File X081101.D 08/11/23 8/11/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	21.9 (21.9)
75	30.0 - 60.0% of mass 95	53.6 (53.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.7 (6.67)
173	Less than 2.0% of mass 174	1.1 (1.2) 1
174	50.0 - 120.0% of mass 95	89.8 (89.8)
175	4.0 - 9.0% of mass 174	7.4 (8.29) 1
176	93.0 - 101.0% of mass 174	87.4 (97.3) 1
177	5.0 - 9.0% of mass 176	6.1 (6.98) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	VSTD000.25	ICAL1	8/11/2023	X081102	VSTD000.25
2	VSTD000.5	ICAL2	8/11/2023	X081103	VSTD000.5
3	VSTD001	ICAL3	8/11/2023	X081104	VSTD001
4	VSTD002	ICAL4	8/11/2023	X081105	VSTD002
5	VSTD005	ICAL5	8/11/2023	X081106	VSTD005
6	VSTD020	ICAL6	8/11/2023	X081107	VSTD020
7	VSTD050	ICAL7	8/11/2023	X081108	VSTD050
8	VSTD100	ICAL8	8/11/2023	X081109	VSTD100
9	VSTD150	ICAL9	8/11/2023	X081110	VSTD150
10	VSTD200	ICAL	8/11/2023	X081111	VSTD200
11	CCV	ICV	8/11/2023	X081113	CCV

Form 5 - Instrument Performance Check

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	Longhorn GW Treatment Plant Bi-Weekly Samples	**HS23080558**	

RunID

Volatiles by EPA 8260

VOA6-443844

Tune File X081101.D 08/11/23 8/11/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	21.9 (21.9)
75	30.0 - 60.0% of mass 95	53.6 (53.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.7 (6.67)
173	Less than 2.0% of mass 174	1.1 (1.2) 1
174	50.0 - 120.0% of mass 95	89.8 (89.8)
175	4.0 - 9.0% of mass 174	7.4 (8.29) 1
176	93.0 - 101.0% of mass 174	87.4 (97.3) 1
177	5.0 - 9.0% of mass 176	6.1 (6.98) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	VLCSW-	LCS	8/11/2023	X081116	VLCSW-230811
2	VBLKW-	MBLK	8/11/2023	X081119	VBLKW-230811
3	HS23080558-	SAMP	8/11/2023	X081121	Trip Blank
4	HS23080558-	SAMP	8/11/2023	X081122	LH18/24-SP650_080823
5	HS23080637-	MS	8/11/2023	X081129	ZZZZZZMS
6	HS23080637-	MSD	8/11/2023	X081130	ZZZZZZMSD
7	CCV-END	CCV_EN	8/11/2023	X081131	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

Volatiles by EPA 8260

RunID VOA6_443843

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	NE 255633	3407 619342	4328 959873	11597 1273733	27672	99620	LINR	0.01337	0.46460		0.99850	
Chloromethane	NE 0.40302	0.57405 0.48018	0.52500 0.50465	0.47096 0.53834	0.46477	0.41794	AVRG		0.48655		11.39424	
Propionitrile	NE 0.07074	0.06787 0.07205	0.07292 0.07170	0.06349 0.07228	0.06817	0.06745	AVRG		0.06963		4.45118	
Vinyl Chloride	NE 0.55667	0.72606 0.61855	0.56186 0.60253	0.60489 0.58278	0.58952	0.55465	AVRG		0.59972		8.75575	
Bromomethane	NE 0.27995	0.35231 0.31382	0.37627 0.32529	0.33070 0.34286	0.30591	0.27830	AVRG		0.32283		10.02785	
Chloroethane	NE 0.36414	0.45634 0.38031	0.43284 0.35909	0.41782 0.35077	0.40656	0.36978	AVRG		0.39307		9.37589	
Trichlorofluoromethane	NE 0.75325	1.10623 0.89244	0.76877 0.85600	0.84856 0.81997	0.85815	0.77853	AVRG		0.85354		12.38612	
Acrolein	NE 22472	323 42571	463 67360	887 87268	2218	7342	LINR	-0.05489	0.01595		0.99825	
Acetone	NE 247355	8080 518775	9915 740284	14349 1042142	31794	100132	LINR	-0.09194	0.18484		0.99800	
1,1-Dichloroethene	NE 0.43569	0.56284 0.48537	0.48932 0.46481	0.51676 0.44882	0.49398	0.44755	AVRG		0.48279		8.24421	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

ICAL Summary Page 2 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Isobutyl Alcohol	NE 0.07652	0.08412 0.07931	0.07401 0.07954	0.07762 0.08132	0.07584	0.07709	AVRG		0.07838		3.90627	
Acetonitrile	NE 0.07456	0.07300 0.07466	0.08481 0.07260	0.08801 0.07232	0.07971	0.07431	AVRG		0.07711		7.47057	
Allyl Chloride	NE 1.44176	1.69809 1.43490	1.64719 1.38774	1.69303 1.37516	1.61564	1.41555	AVRG		1.52323		8.97832	
Iodomethane	NE 646092	2898 1612228	5195 2614120	9663 3724033	31977	171922	QUAD	0.11120	1.71280	-0.04510	0.99848	
Acrylonitrile	NE 0.22137	0.24952 0.22377	0.24284 0.21854	0.24432 0.21551	0.25192	0.22541	AVRG		0.23258		6.16962	
Methylene Chloride	NE 0.56122	0.64115 0.54894	0.71364 0.51621	0.63887 0.51110	0.71498	0.60296	AVRG		0.60545		12.80901	
Methyl tert-butyl ether	NE 1.65215	1.97638 1.61767	1.87864 1.59510	1.78399 1.58849	1.77267	1.63417	AVRG		1.72214		8.03192	
Carbon Disulfide	NE 1.34724	1.48863 1.47632	1.44347 1.42960	1.48106 1.39624	1.47715	1.35583	AVRG		1.43284		3.82349	
trans-1,2-Dichloroethene	NE 0.52456	0.63439 0.54249	0.61656 0.52259	0.56699 0.51339	0.58807	0.54041	AVRG		0.56105		7.73785	
Vinyl Acetate	NE 1.64724	1.83435 1.68753	1.67683 1.65594	1.52797 1.65375	1.61303	1.63980	AVRG		1.65961		4.84390	
1,1-Dichloroethane	NE 0.98414	1.21108 0.99880	1.23422 0.94407	1.13098 0.93091	1.06669	1.00863	AVRG		1.05661		10.60256	
Chloroprene	NE 0.18511	0.24053 0.21791	0.22398 0.21096	0.21746 0.20023	0.21465	0.19285	AVRG		0.21152		7.94039	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
2-Butanone	NE 0.19090	0.16626 0.20804	0.17705 0.19986	0.17177 0.20476	0.18179	0.16529	AVRG		0.18508		8.88859	
Methacrylonitrile	NE 0.48682	0.53696 0.50767	0.48185 0.50221	0.47953 0.50039	0.50962	0.48295	AVRG		0.49867		3.69719	
2,2-Dichloropropane	NE 420039	4612 949589	9399 1464683	17055 1951668	43583	162441	LINR	-0.00034	0.70909		0.99916	
cis-1,2-Dichloroethene	NE 0.52504	0.58922 0.54660	0.54283 0.52807	0.50439 0.52661	0.55456	0.53181	AVRG		0.53879		4.42802	
Chloroform	NE 0.88361	0.94895 0.91936	0.99572 0.88022	0.96143 0.87517	0.96651	0.90377	AVRG		0.92608		4.72192	
Bromochloromethane	NE 0.28903	0.30862 0.29941	0.37772 0.28783	0.31678 0.27712	0.30706	0.29309	AVRG		0.30629		9.60862	
1,1,1-Trichloroethane	NE 0.70525	0.79991 0.79429	0.67228 0.77108	0.70847 0.75445	0.76754	0.71836	AVRG		0.74351		5.94209	
1,1-Dichloropropene	NE 0.35874	0.44123 0.42677	0.35374 0.42631	0.38325 0.41429	0.36402	0.37247	AVRG		0.39342		8.57192	
1,2-Dichloroethane	NE 0.44581	0.52772 0.46238	0.52519 0.46248	0.45791 0.45826	0.48129	0.45673	AVRG		0.47531		6.40385	
Carbon Tetrachloride	NE 0.35954	0.47967 0.43348	0.39978 0.44098	0.40393 0.42221	0.43067	0.36764	AVRG		0.41532		8.99651	
Benzene	NE 1.15436	1.38413 1.23319	1.27200 1.23296	1.17750 1.21280	1.24217	1.17492	AVRG		1.23156		5.55716	
Trichloroethene	NE 0.32756	0.40599 0.35784	0.34534 0.36244	0.34459 0.35492	0.35435	0.33246	AVRG		0.35394		6.40889	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromodichloromethane	NE 0.42912	0.53776 0.45138	0.49960 0.44887	0.42015 0.45134	0.45657	0.43323	AVRG		0.45867		8.13672	
Methyl Methacrylate	NE 0.45708	0.46821 0.47469	0.46970 0.46852	0.43319 0.47446	0.45468	0.43984	AVRG		0.46004		3.27954	
2-Chloroethylvinyl ether	NE 0.10527	0.13044 0.11857	0.12050 0.11999	0.12280 0.12146	0.11033	0.10670	AVRG		0.11734		7.03256	
1,2-Dichloropropane	NE 0.32291	0.41261 0.34183	0.36231 0.34389	0.33070 0.34368	0.34126	0.32613	AVRG		0.34726		7.82046	
2-Nitropropane	NE 0.16504	0.19619 0.18033	0.20580 0.17879	0.19631 0.18450	0.18445	0.16142	AVRG		0.18365		7.90215	
Dibromomethane	NE 0.21505	0.27102 0.22287	0.28256 0.22326	0.23327 0.22465	0.24153	0.22164	AVRG		0.23732		10.02170	
4-Methyl-2-Pentanone	NE 0.33755	0.37287 0.35276	0.36808 0.35896	0.38125 0.36361	0.34499	0.34783	AVRG		0.35866		3.95589	
cis-1,3-Dichloropropene	NE 0.49701	0.60888 0.54096	0.51488 0.54667	0.47545 0.55656	0.48634	0.49691	AVRG		0.52485		8.07803	
Ethyl Methacrylate	NE 0.43754	0.47636 0.46383	0.47511 0.47685	0.44432 0.48333	0.42713	0.43820	AVRG		0.45808		4.63830	
Toluene	NE 1.30542	1.58762 1.39612	1.45153 1.40769	1.29669 1.38932	1.38586	1.31867	AVRG		1.39321		6.42306	
trans-1,3-Dichloropropene	NE 0.41239	0.51608 0.45869	0.41702 0.46634	0.40845 0.47803	0.40096	0.40651	AVRG		0.44050		9.22391	
2-Hexanone	NE 0.22991	0.23756 0.23902	0.24514 0.24226	0.24516 0.25074	0.23798	0.23897	AVRG		0.24075		2.46712	

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Initial Calibration Data

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

ICAL Summary Page 5 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
1,1,2-Trichloroethane	NE 0.26299	0.30480 0.27255	0.28308 0.27293	0.27202 0.27412	0.28463	0.27234	AVRG		0.27772		4.31956	
1,3-Dichloropropane	NE 0.53265	0.64521 0.54426	0.63134 0.55126	0.54276 0.55377	0.56859	0.53964	AVRG		0.56772		7.29205	
Dibromochloromethane	NE 0.39604	0.42562 0.40981	0.40064 0.41415	0.37380 0.41796	0.38120	0.38806	AVRG		0.40081		4.38226	
Tetrachloroethene	NE 0.26579	0.32145 0.31165	0.27810 0.31659	0.25034 0.30175	0.28769	0.27284	AVRG		0.28958		8.54849	
1,2-Dibromoethane	NE 0.32798	0.36532 0.33179	0.33937 0.33669	0.33095 0.33988	0.34531	0.33603	AVRG		0.33926		3.27108	
1-Chlorohexane	NE 0.25100	0.30188 0.31383	0.31158 0.32140	0.27315 0.31291	0.27363	0.24424	AVRG		0.28929		10.11307	
Chlorobenzene	NE 0.90541	1.10534 0.95312	0.97241 0.96654	0.90938 0.96446	0.95264	0.91060	AVRG		0.95999		6.31738	
1,1,1,2-Tetrachloroethane	NE 0.35585	0.40402 0.38079	0.35426 0.38526	0.35087 0.38535	0.36062	0.36038	AVRG		0.37082		4.98176	
Ethylbenzene	NE 0.45055	0.53905 0.48903	0.45245 0.48823	0.42306 0.48059	0.48308	0.46077	AVRG		0.47409		6.90368	
m,p-Xylenes	NE 0.58130	0.68357 0.62807	0.56743 0.64071	0.54293 0.62674	0.60154	0.58590	AVRG		0.60647		7.05323	
o-Xylene	NE 0.55705	0.65150 0.60406	0.62675 0.61436	0.56336 0.61385	0.57393	0.57386	AVRG		0.59764		5.38384	
Styrene	NE 0.99646	1.04658 1.04857	0.86091 1.08065	0.85907 1.08017	0.98330	0.98879	AVRG		0.99383		8.47428	

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Bromoform	NE 0.26853	0.25707 0.29618	0.24044 0.30934	0.24432 0.31415	0.23803	0.26583	AVRG		0.27043		10.87778	
Isopropylbenzene	NE 1.37150	1.80622 1.56611	1.32978 1.60724	1.28653 1.56968	1.41994	1.40919	AVRG		1.48513		11.12077	
1,1,2,2-Tetrachloroethane	NE 0.75920	0.92909 0.76344	0.86394 0.77928	0.87075 0.78188	0.78812	0.78941	AVRG		0.81390		7.27290	
1,2,3-Trichloropropane	NE 0.58888	0.65469 0.55415	0.62918 0.60328	0.62358 0.55649	0.58743	0.58923	AVRG		0.59855		5.53581	
trans-1,4-Dichloro-2-butene	NE 0.11541	0.13890 0.12664	0.13239 0.13335	0.11790 0.13591	0.11729	0.11679	AVRG		0.12607		7.41052	
n-Propylbenzene	NE 2.80210	3.53439 3.13219	2.63209 3.15136	2.53209 3.04325	2.84258	2.93692	AVRG		2.95633		10.23808	
Bromobenzene	NE 0.75715	0.95370 0.77334	0.80509 0.77592	0.75227 0.77226	0.80991	0.79277	AVRG		0.79916		7.65867	
1,3,5-Trimethylbenzene	NE 2.02308	2.48268 2.25923	2.07330 2.34365	1.81975 2.30051	2.04869	2.10015	AVRG		2.16123		9.33218	
2-Chlorotoluene	NE 1.75224	2.20579 1.82894	2.06491 1.83303	1.79059 1.80312	1.89312	1.86633	AVRG		1.89312		7.79430	
4-Chlorotoluene	NE 2.06478	2.26845 2.19780	2.25121 2.22960	2.10906 2.22059	2.12065	2.14258	AVRG		2.17830		3.26734	
tert-Butylbenzene	NE 1.70051	2.14748 1.96448	1.73480 2.00576	1.56846 1.91951	1.81705	1.80636	AVRG		1.85160		9.51930	
1,2,4-Trimethylbenzene	NE 2.06008	2.64935 2.28018	2.26936 2.33175	1.89125 2.27563	2.13151	2.14102	AVRG		2.22557		9.44401	

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Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

ICAL Summary Page 7 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
sec-Butylbenzene	NE 2.31593	2.76225 2.81651	2.33429 2.87775	2.15274 2.71008	2.46828	2.40717	AVRG		2.53833		10.17944	
p-Isopropyltoluene	NE 2.09380	2.76970 2.50471	1.96893 2.57341	1.91469 2.45434	2.14864	2.22762	AVRG		2.29509		12.79259	
1,3-Dichlorobenzene	NE 1.34767	1.61190 1.43556	1.42934 1.45343	1.32428 1.42665	1.39947	1.38137	AVRG		1.42329		5.80050	
1,4-Dichlorobenzene	NE 1.43902	1.66298 1.51652	1.54913 1.54268	1.47867 1.51656	1.54699	1.46611	AVRG		1.52430		4.24913	
Benzyl Chloride	NE 0.72782	0.67288 0.86124	0.55546 0.91262	0.58458 0.91977	0.55707	0.64970	AVRG		0.71568		20.72330	*
n-Butylbenzene	NE 1021843	10518 2801951	15267 4582820	30922 6046266	92255	387389	LINR	0.04039	2.32851		0.99698	
1,2-Dichlorobenzene	NE 1.35288	1.53229 1.44711	1.50392 1.45906	1.36395 1.45071	1.41655	1.40391	AVRG		1.43671		4.13675	
1,2-Dibromo-3-Chloropropane	NE 0.13161	0.13979 0.14237	0.13364 0.14298	0.14414 0.14312	0.13389	0.12727	AVRG		0.13765		4.46304	
1,2,4-Trichlorobenzene	NE 0.87140	0.96424 1.01824	0.93936 1.05089	0.86817 1.02829	0.89513	0.92080	AVRG		0.95073		7.25032	
Hexachlorobutadiene	NE 188947	1914 585400	4132 NE	6937 NE	18865	73649	QUAD	-0.01661	3.35202	-1.30864	0.99909	
Naphthalene	NE 2.18673	2.64769 2.37601	2.43467 2.41023	2.42767 2.40050	2.19435	2.27928	AVRG		2.37302		5.95573	
1,2,3-Trichlorobenzene	NE 0.84155	1.12740 0.93487	0.95656 0.95660	0.86730 0.93825	0.86478	0.85096	AVRG		0.92647		9.54913	

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Ethyl Acetate	NE 0.54091	0.61659 0.56275	0.58547 0.54012	0.58404 0.54797	0.59021	0.59722	AVRG		0.57392		4.72995	
Methyl Acrylate	NE 0.46382	0.53729 0.47598	0.51625 0.46839	0.49042 0.52913	0.51921	0.44523	AVRG		0.49397		6.60703	
n-Butanol	NE 143573	1373 333572	2659 550912	5108 804319	9555	50123	LINR	1.35820	0.01419		0.99642	
Ethyl Acrylate	NE 1.12556	1.26235 1.26945	1.08473 1.27971	1.12017 1.30407	1.10451	1.09383	AVRG		1.18271		7.84082	
Cyclohexanone	NE 0.02914	0.03613 0.02972	0.03766 0.02664	0.03630 0.02699	0.03301	0.03098	AVRG		0.03184		12.97281	
1,4-Dioxane	0.00610 0.00592	0.00680 0.00628	0.00660 0.00624	0.00700 0.00645	0.00628	0.00588	AVRG		0.00636		5.71059	
n-Hexane	NE 282893	4056 828407	6841 NE	12200 NE	32239	118882	QUAD	-0.02185	2.52661	-0.74331	0.99863	
Freon TF	NE 245533	3204 646829	4459 1017540	10755 1294079	27608	98415	LINR	0.02270	0.48156		0.99589	
Methyl Acetate	NE 0.43072	0.51322 0.43094	0.50555 0.40586	0.44863 0.40874	0.44649	0.45354	AVRG		0.44930		8.43501	
Methylcyclohexane	NE 0.69881	0.81433 0.79595	0.70929 0.82665	0.69720 0.83653	0.70060	0.68088	AVRG		0.75114		8.66448	
Isopropyl alcohol	NE 441739	5543 902720	10285 1400869	25882 1951400	46061	173548	LINR	-0.25785	0.03465		0.99977	
Amyl alcohol	NE NE	NE NE	0.00690 0.00109	0.00185 0.01156	0.00230	0.00114	AVRG		0.00414		102	*

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Allyl alcohol	NE 282893	4860 828407	4388 NE	12200 NE	32239	118882	QUAD	-0.39685	50.36143	-14.75731	0.99855	
4-Methyl-2-pentanol	NE 0.07326	0.11612 0.08165	0.15081 0.08922	0.10586 0.09301	0.10408	0.07923	AVRG		0.09925		23.99067	*
Tert-butyl alcohol	NE 745105	9824 1555693	18788 2402568	45475 3353385	82288	300900	LINR	-0.25928	0.05950		0.99971	
Diethyl ether	NE 0.42791	0.48305 0.41719	0.49765 0.40806	0.44762 0.40022	0.46546	0.42461	AVRG		0.44131		7.75641	
1,3-Butadiene	NE 0.46036	0.63274 0.52619	0.50215 0.51269	0.54090 0.49908	0.49939	0.46259	AVRG		0.51512		9.96029	
Cyclohexane	NE 340162	4440 918146	5861 1454384	12705 1872161	36420	130025	LINR	0.03671	0.69448		0.99609	
Tetrahydrofuran	NE 0.09363	0.11697 0.09327	0.10303 0.09239	0.09100 0.09224	0.10554	0.08975	AVRG		0.09754		9.33471	
alpha-Methylstyrene	NE 1.02875	1.23121 1.10905	0.98100 1.12766	0.94266 1.10800	0.99132	1.05181	AVRG		1.06350		8.42717	
Diisopropyl ether	NE 1.75811	2.02254 1.77715	1.90531 1.72322	1.75503 1.75247	1.81737	1.69593	AVRG		1.80079		5.69680	
Dichlorofluoromethane	NE 0.84888	NE 0.86145	NE 0.83431	0.93125 0.83443	0.89736	0.82858	AVRG		0.86232		4.45646	*
Propylene oxide	NE 0.06424	0.11812 0.05766	0.15030 0.05779	0.07718 0.05494	0.07954	0.06651	AVRG		0.08070		40.27437	*
3-Methyl-1-butanol	NE 0.00816	NE 0.00898	0.00730 0.00977	0.00944 0.01025	0.00731	0.00797	AVRG		0.00865		13.01043	*

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RunID VOA6_443843

Volatiles by EPA 8260

ICAL Summary Page 10 / 12

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Butyl acrylate	NE 0.78908	0.81663 0.83421	0.79624 0.90433	0.77067 0.91868	0.74966	0.75021	AVRG		0.81441		7.58811	
Butyl methacrylate	NE 1.00856	1.17765 0.95368	1.00219 1.01349	0.96966 1.00259	1.00284	0.99037	AVRG		1.01345		6.37238	
Dicyclopentadiene	NE 1468680	16221 3267261	27109 5365427	58027 7593221	137259	526364	QUAD	-0.00191	0.38369	-0.00283	0.99996	
1,2,3-Trimethylbenzene	NE 2.21356	2.58628 2.25830	2.52247 2.34939	2.33551 2.32313	2.18072	2.11777	AVRG		2.32079		6.61312	
Ethanol	NE 75258	1086 156245	1697 233477	4283 323730	8818	29323	LINR	-0.50438	0.00577		0.99929	
tert-Butyl formate	NE 0.38162	0.58304 0.42429	NE 0.43222	0.69585 0.51008	0.49629	0.47342	AVRG		0.49960		20.07517	*
3,3-Dimethyl-1-butanol	NE 0.03749	NE 0.04006	0.07214 0.04264	0.04999 0.04341	0.04963	0.04256	AVRG		0.04724		23.15285	*
tert-Amyl methyl ether	NE 1.59181	2.42299 1.63848	2.18892 2.03326	1.73650 2.07152	1.83789	1.55625	AVRG		1.89751		15.76883	*
tert-Butyl ethyl ether	NE 1.58380	1.59126 1.61689	1.72822 1.61959	1.59721 1.62889	1.64579	1.55824	AVRG		1.61888		3.00434	
tert-Amyl alcohol	NE 0.03816	0.05830 0.04243	0.04896 0.04322	0.06959 0.05101	0.04963	0.04734	AVRG		0.04985		18.83220	*
Epichlorohydrin	NE 0.02768	0.03345 0.02885	0.03057 0.02997	0.03510 0.02975	0.02973	0.03010	AVRG		0.03058		7.49678	
Isoprene	NE 0.17180	0.38017 0.19332	0.14142 0.18673	0.23738 0.18158	0.18600	0.19487	AVRG		0.20814		33.23104	*

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n-Amyl acetate	NE 0.67624	NE 0.73143	NE 0.78198	NE 0.79667	0.73221	0.71113	AVRG		0.73828		6.05429	*
Isopropyl acetate	NE 0.95278	1.17473 0.99604	0.94826 1.02757	0.95670 1.03080	1.03164	0.97079	AVRG		1.00992		7.00182	
n-Butyl acetate	NE 0.55783	0.58139 0.58885	0.52964 0.59863	0.55649 0.61777	0.56545	0.56554	AVRG		0.57351		4.56191	
Acetaldehyde	NE 128302	NE 249925	4717 NE	7566 NE	13449	59320	LINR	-0.17271	0.04834		0.99748	
Methyl Amyl Ketone	NE 0.82280	0.76625 0.87635	0.96635 0.95086	0.80166 0.95547	0.85420	0.83850	AVRG		0.87027		8.33273	
Dimethyl Disulfide	NE 0.69918	0.59913 0.71672	0.57986 0.74749	0.57899 0.75166	0.59986	0.65184	AVRG		0.65830		10.89510	
Isobutylene	NE 0.05515	0.07320 0.06062	0.07525 0.06306	0.06686 0.07052	0.06679	0.05900	AVRG		0.06561		10.25599	
2-Ethylhexyl Acrylate	NE 1.07240	1.03931 1.13795	0.79638 1.17365	0.96214 1.17150	0.86751	0.97195	AVRG		1.02142		13.06585	
94 1,2-Dichloroethylene (total)	NE 0.52480	0.61181 0.54455	0.57970 0.52533	0.53569 0.52000	0.57131	0.53611	AVRG		0.54992		5.65149	
95 Xylenes (total)	NE 0.54273	0.65181 0.60806	0.56564 0.61968	0.52445 0.61761	0.56197	0.54685	AVRG		0.58209		7.43849	
30 Dibromofluoromethane	NE 277572	4322 623623	5954 899883	12062 1262400	29825	119843	LINR	-0.01675	0.45102		0.99823	
35 1,2-Dichloroethane-d4	NE 321172	4095 683505	8038 1002392	13488 1400428	36656	130066	LINR	-0.02225	0.49960		0.99882	

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48 Toluene-d8	NE 0.98459	1.55411 1.13736	1.15990 1.05055	1.22961 1.08227	1.25336	1.13858	AVRG		1.17670		13.96851	
69 4-Bromofluorobenzene	NE 440611	8224 1004363	9648 1512449	21205 2160189	49251	175173	LINR	0.00560	0.49634		0.99943	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id CCV
Level LOW
Fraction VOA
Client Smp ID CCV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.00	49.04	98.08	80-120	
1,1,1-Trichloroethane	50.00	45.55	91.12	80-120	
1,1,2,2-Tetrachloroethane	50.00	48.03	96.07	80-120	
Freon TF	50.00	43.35	86.71	80-120	
Methyl Acetate	50.00	47.61	95.23	80-120	
Cyclohexane	50.00	42.28	84.57	80-120	
Methylcyclohexane	50.00	43.16	86.33	80-120	
Carbon Disulfide	100.00	91.11	91.12	80-120	
2-Hexanone	100.00	100.30	100.30	80-120	
1,1,2-Trichloroethane	50.00	48.99	98.00	80-120	
1,1-Dichloroethane	50.00	44.61	89.24	80-120	
1,1-Dichloroethene	50.00	44.85	89.71	80-120	
1,1-Dichloropropene	50.00	46.28	92.58	80-120	
1,2,3-Trichlorobenzene	50.00	46.26	92.54	80-120	
1,2,3-Trichloropropane	50.00	50.58	101.17	80-120	
1,2,4-Trichlorobenzene	50.00	47.31	94.63	80-120	
1,2,4-Trimethylbenzene	50.00	45.73	91.46	80-120	
1,2-Dibromo-3-Chloropropane	50.00	49.55	99.11	80-120	
1,2-Dibromoethane	50.00	48.92	97.85	80-120	
Acrolein	100.00	94.82	94.82	80-120	
Acrylonitrile	100.00	89.79	89.79	80-120	
1,2-Dichlorobenzene	50.00	46.71	93.42	80-120	
1,2-Dichloroethane	50.00	47.60	95.21	80-120	
1,2-Dichloropropane	50.00	46.92	93.84	80-120	
1,3,5-Trimethylbenzene	50.00	45.53	91.07	80-120	
1,3-Dichlorobenzene	50.00	47.31	94.63	80-120	
1,3-Dichloropropane	50.00	47.80	95.62	80-120	
1,4-Dichlorobenzene	50.00	46.50	93.00	80-120	
1-Chlorohexane	50.00	43.86	87.73	80-120	
2,2-Dichloropropane	50.00	47.67	95.34	80-120	
2-Butanone	100.00	106.05	106.06	80-120	
2-Chloroethylvinyl ether	100.00	97.56	97.56	80-120	
2-Chlorotoluene	50.00	45.50	91.02	80-120	
4-Chlorotoluene	50.00	46.95	93.91	80-120	

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id CCV
Level LOW
Fraction VOA
Client Smp ID CCV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	45.14	90.30	80-120	
4-Methyl-2-Pentanone	100.00	98.29	98.29	80-120	
Acetone	100.00	111.66	111.67	80-120	
Acetonitrile	500.00	408.87	81.78	80-120	
Allyl Chloride	50.00	41.78	83.56	80-120	
Benzene	50.00	47.27	94.56	80-120	
Bromobenzene	50.00	47.79	95.59	80-120	
Bromochloromethane	50.00	46.58	93.18	80-120	
Bromodichloromethane	50.00	47.61	95.22	80-120	
Bromoform	50.00	52.37	104.75	80-120	
Bromomethane	50.00	49.14	98.30	80-120	
Carbon Tetrachloride	50.00	44.62	89.26	80-120	
Chlorobenzene	50.00	46.85	93.72	80-120	
Chloroethane	50.00	44.10	88.21	80-120	
Chloroform	50.00	46.14	92.28	80-120	
Chloromethane	50.00	46.79	93.60	80-120	
Chloroprene	50.00	44.24	88.49	80-120	
cis-1,2-Dichloroethene	50.00	46.74	93.49	80-120	
cis-1,3-Dichloropropene	50.00	48.57	97.14	80-120	
Dibromochloromethane	50.00	50.08	100.16	80-120	
Dibromomethane	50.00	46.76	93.54	80-120	
Dichlorodifluoromethane	50.00	45.43	90.86	80-120	
Ethylbenzene	50.00	46.69	93.39	80-120	
Ethyl Methacrylate	50.00	45.38	90.77	80-120	
Iodomethane	100.00	84.97	84.97	80-120	
Isobutyl Alcohol	1000.00	948.23	94.82	70-130	
Propionitrile	500.00	493.55	98.71	70-130	
Hexachlorobutadiene	50.00	55.74	111.50	80-120	
Isopropylbenzene	50.00	45.23	90.48	80-120	
m,p-Xylenes	100.00	93.85	93.86	80-120	
Methyl tert-butyl ether	50.00	43.73	87.46	80-120	
Methylene Chloride	50.00	44.31	88.63	80-120	
Methacrylonitrile	50.00	45.21	90.44	80-120	
Methyl Methacrylate	50.00	44.49	88.98	80-120	

Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443843

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id CCV
Level LOW
Fraction VOA
Client Smp ID CCV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	41.72	83.46	80-120	
n-Propylbenzene	50.00	46.88	93.78	80-120	
Naphthalene	50.00	46.99	93.99	80-120	
o-Xylene	50.00	46.65	93.31	80-120	
sec-Butylbenzene	50.00	45.63	91.26	80-120	
Styrene	50.00	49.82	99.65	80-120	
tert-Butylbenzene	50.00	44.87	89.74	80-120	
Tetrachloroethene	50.00	46.44	92.89	80-120	
Toluene	50.00	46.60	93.20	80-120	
trans-1,2-Dichloroethene	50.00	44.38	88.76	80-120	
trans-1,3-Dichloropropene	50.00	49.15	98.31	80-120	
trans-1,4-Dichloro-2-butene	50.00	46.25	92.50	80-120	
Trichloroethene	50.00	46.39	92.78	80-120	
Trichlorofluoromethane	50.00	43.52	87.04	80-120	
Vinyl Acetate	100.00	96.33	96.34	80-120	
Vinyl Chloride	50.00	45.74	91.48	80-120	
1,2-Dichloroethylene (total)	100.00	91.12	91.13	80-120	
Xylenes (total)	150.00	140.51	93.67	80-120	
1,4-Dioxane	1000.00	972.68	97.27	80-120	
Dibromofluoromethane	50.00	51.73	103.47	71-125	
1,2-Dichloroethane-d4	50.00	51.05	102.10	70-125	
Toluene-d8	50.00	48.82	97.66	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443844

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X081131.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :47
ICAL Date(s) 11-AUG-2023 11-AUG-2023
ICAL Times :33 14:57
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00636	0.00606	0.00606	0.001	4.61996	50.0	Averaged	
1,3-Butadiene	0.51512	0.47623	0.47623	0.100	7.54908	50.0	Averaged	
Methacrylonitrile	0.49867	0.48358	0.48358	0.100	3.02562	50.0	Averaged	
Isobutyl Alcohol	0.07838	0.07573	0.07573	0.005	3.36981	50.0	Averaged	
Acetonitrile	0.07711	0.06793	0.06793	0.005	11.90994	50.0	Averaged	
Allyl Chloride	1.52323	1.33863	1.33863	0.100	12.11916	50.0	Averaged	
Propionitrile	0.06963	0.06928	0.06928	0.010	0.49910	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.12607	0.11434	0.11434	0.050	9.30160	50.0	Averaged	
Acetaldehyde	200	174	0.04419	0.001	12.90509	50.0	Linear	
Chloroprene	0.21152	0.19665	0.19665	0.100	7.02801	50.0	Averaged	
Ethyl Acetate	0.57392	0.56582	0.56582	0.100	1.41193	50.0	Averaged	
Methyl Methacrylate	0.46004	0.44233	0.44233	0.100	3.84893	50.0	Averaged	
Ethyl Methacrylate	0.45808	0.44088	0.44088	0.100	3.75358	50.0	Averaged	
Methyl Acrylate	0.49397	0.47607	0.47607	0.100	3.62389	50.0	Averaged	
n-Butanol	1000	899	0.01180	0.005	10.06221	50.0	Linear	
n-Hexane	50.0	56.12686	0.53813	0.100	-12.25373	50.0	Quadratic	
Diethyl ether	0.44131	0.40366	0.40366	0.100	8.53186	50.0	Averaged	
Tetrahydrofuran	0.09754	0.08823	0.08823	0.001	9.53678	50.0	Averaged	
alpha-Methylstyrene	1.06350	1.06710	1.06710	0.100	-0.33899	50.0	Averaged	
Diisopropyl ether	1.80079	1.67684	1.67684	0.100	6.88315	50.0	Averaged	
Butyl acrylate	0.81441	0.79638	0.79638	0.100	2.21474	50.0	Averaged	
Ethanol	1000	1057	0.00625	0.001	-5.69820	50.0	Linear	
Dimethyl Disulfide	0.65830	0.65774	0.65774	0.100	0.08615	50.0	Averaged	
Epichlorohydrin	0.03058	0.02801	0.02801	0.001	8.39214	50.0	Averaged	
Dicyclopentadiene	50.0	42.96123	2.28274	0.100	14.07755	50.0	Quadratic	
1,2,3-Trimethylbenzene	2.32079	2.02650	2.02650	0.100	12.68060	50.0	Averaged	
2-Ethylhexyl Acrylate	1.02142	0.93881	0.93881	0.100	8.08747	50.0	Averaged	
Benzyl Chloride	0.71568	0.67070	0.67070	0.010	6.28493	50.0	Averaged	
Cyclohexanone	0.03184	0.02347	0.02347	0.005	26.29091	50.0	Averaged	
Isobutylene	0.06561	0.05553	0.05553	0.010	15.35069	50.0	Averaged	
Ethyl Acrylate	1.18271	1.03032	1.03032	0.100	12.88505	50.0	Averaged	
Butyl methacrylate	1.01345	0.98970	0.98970	0.100	2.34326	50.0	Averaged	
Isopropyl acetate	1.00992	0.95003	0.95003	0.100	5.93016	50.0	Averaged	
n-Butyl acetate	0.57351	0.59264	0.59264	0.100	-3.33556	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443844

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X081131.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :47
ICAL Date(s) 11-AUG-2023 11-AUG-2023
ICAL Times :33 14:57
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Dichlorodifluoromethane	50.0	46.79703	0.42863	0.100	6.40594	50.0	Linear	
Chloromethane	0.48655	0.46831	0.46831	0.100	3.74882	50.0	Averaged	
Vinyl Chloride	0.59972	0.57219	0.57219	0.100	4.59134	50.0	Averaged	
Bromomethane	0.32283	0.30413	0.30413	0.100	5.79075	50.0	Averaged	
Chloroethane	0.39307	0.37478	0.37478	0.100	4.65481	50.0	Averaged	
Trichlorofluoromethane	0.85354	0.80222	0.80222	0.100	6.01319	50.0	Averaged	
Acrolein	100	117	0.01916	0.010	-17.35059	50.0	Linear	
Acetone	100	92.24927	0.17901	0.100	7.75073	50.0	Linear	
1,1-Dichloroethene	0.48279	0.44525	0.44525	0.100	7.77581	50.0	Averaged	
Iodomethane	100	106	0.60513	0.100	-5.90288	50.0	Quadratic	
Acrylonitrile	0.23258	0.21493	0.21493	0.050	7.58792	50.0	Averaged	
Methylene Chloride	0.60545	0.55366	0.55366	0.100	8.55431	50.0	Averaged	
Methyl tert-butyl ether	1.72214	1.58257	1.58257	0.100	8.10461	50.0	Averaged	
Carbon Disulfide	1.43284	1.34623	1.34623	0.100	6.04419	50.0	Averaged	
trans-1,2-Dichloroethene	0.56105	0.51805	0.51805	0.100	7.66386	50.0	Averaged	
Vinyl Acetate	1.65961	1.64348	1.64348	0.010	0.97184	50.0	Averaged	
1,1-Dichloroethane	1.05661	0.97641	0.97641	0.200	7.59071	50.0	Averaged	
2-Butanone	0.18508	0.18277	0.18277	0.100	1.25061	50.0	Averaged	
2,2-Dichloropropane	50.0	44.99576	0.63836	0.100	10.00848	50.0	Linear	
cis-1,2-Dichloroethene	0.53879	0.52492	0.52492	0.100	2.57451	50.0	Averaged	
Chloroform	0.92608	0.89356	0.89356	0.200	3.51153	50.0	Averaged	
Bromochloromethane	0.30629	0.29662	0.29662	0.100	3.15771	50.0	Averaged	
30 Dibromofluoromethane	50.0	53.25372	0.48792	0.100	-6.50745	50.0	Linear	
1,1,1-Trichloroethane	0.74351	0.73265	0.73265	0.100	1.46064	50.0	Averaged	
1,1-Dichloropropene	0.39342	0.37245	0.37245	0.100	5.33199	50.0	Averaged	
1,2-Dichloroethane	0.47531	0.44960	0.44960	0.100	5.40929	50.0	Averaged	
Carbon Tetrachloride	0.41532	0.38705	0.38705	0.100	6.80761	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	51.79453	0.52864	0.100	-3.58906	50.0	Linear	
Benzene	1.23156	1.16575	1.16575	0.500	5.34383	50.0	Averaged	
Trichloroethene	0.35394	0.33409	0.33409	0.200	5.60873	50.0	Averaged	
Bromodichloromethane	0.45867	0.43201	0.43201	0.200	5.81310	50.0	Averaged	
2-Chloroethylvinyl ether	0.11734	0.11001	0.11001	0.001	6.24604	50.0	Averaged	
1,2-Dichloropropane	0.34726	0.32918	0.32918	0.100	5.20711	50.0	Averaged	
Dibromomethane	0.23732	0.21996	0.21996	0.100	7.31300	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443844

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X081131.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :47
ICAL Date(s) 11-AUG-2023 11-AUG-2023
ICAL Times :33 14:57
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
4-Methyl-2-Pentanone	0.35866	0.34476	0.34476	0.100	3.87385	50.0	Averaged	
cis-1,3-Dichloropropene	0.52485	0.50240	0.50240	0.200	4.27702	50.0	Averaged	
48 Toluene-d8	1.17670	1.13596	1.13596	0.100	3.46205	50.0	Averaged	
Toluene	1.39321	1.32457	1.32457	0.400	4.92717	50.0	Averaged	
trans-1,3-Dichloropropene	0.44050	0.42641	0.42641	0.100	3.19828	50.0	Averaged	
2-Hexanone	0.24075	0.23689	0.23689	0.100	1.60342	50.0	Averaged	
1,1,2-Trichloroethane	0.27772	0.26863	0.26863	0.100	3.27097	50.0	Averaged	
1,3-Dichloropropane	0.56772	0.53727	0.53727	0.100	5.36375	50.0	Averaged	
Dibromochloromethane	0.40081	0.39537	0.39537	0.100	1.35582	50.0	Averaged	
Tetrachloroethene	0.28958	0.27995	0.27995	0.200	3.32469	50.0	Averaged	
1,2-Dibromoethane	0.33926	0.32927	0.32927	0.100	2.94405	50.0	Averaged	
1-Chlorohexane	0.28929	0.27497	0.27497	0.100	4.94941	50.0	Averaged	
Chlorobenzene	0.95999	0.90916	0.90916	0.500	5.29468	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.37082	0.36656	0.36656	0.100	1.14896	50.0	Averaged	
Ethylbenzene	0.47409	0.45143	0.45143	0.100	4.78097	50.0	Averaged	
m,p-Xylenes	0.60647	0.58796	0.58796	0.100	3.05121	50.0	Averaged	
o-Xylene	0.59764	0.56863	0.56863	0.300	4.85393	50.0	Averaged	
Styrene	0.99383	1.00074	1.00074	0.300	-0.69518	50.0	Averaged	
Bromoform	0.27043	0.27469	0.27469	0.100	-1.57303	50.0	Averaged	
Isopropylbenzene	1.48513	1.42625	1.42625	0.100	3.96495	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.81390	0.77839	0.77839	0.300	4.36349	50.0	Averaged	
1,2,3-Trichloropropane	0.59855	0.59145	0.59145	0.100	1.18488	50.0	Averaged	
n-Propylbenzene	2.95633	2.97677	2.97677	0.100	-0.69152	50.0	Averaged	
Bromobenzene	0.79916	0.78359	0.78359	0.100	1.94711	50.0	Averaged	
1,3,5-Trimethylbenzene	2.16123	2.11607	2.11607	0.100	2.08947	50.0	Averaged	
2-Chlorotoluene	1.89312	1.81645	1.81645	0.100	4.05009	50.0	Averaged	
4-Chlorotoluene	2.17830	2.13201	2.13201	0.100	2.12497	50.0	Averaged	
tert-Butylbenzene	1.85160	1.82873	1.82873	0.100	1.23517	50.0	Averaged	
1,2,4-Trimethylbenzene	2.22557	2.15051	2.15051	0.100	3.37259	50.0	Averaged	
sec-Butylbenzene	2.53833	2.55309	2.55309	0.100	-0.58117	50.0	Averaged	
p-Isopropyltoluene	2.29509	2.24258	2.24258	0.100	2.28807	50.0	Averaged	
1,3-Dichlorobenzene	1.42329	1.39100	1.39100	0.600	2.26875	50.0	Averaged	
1,4-Dichlorobenzene	1.52430	1.47601	1.47601	0.400	3.16789	50.0	Averaged	
n-Butylbenzene	50.0	45.17107	2.00957	0.500	9.65787	50.0	Linear	

Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder HS23080558

RunID VOA6_443844

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X081131.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :47
ICAL Date(s) 11-AUG-2023 11-AUG-2023
ICAL Times :33 14:57
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichlorobenzene	1.43671	1.37995	1.37995	0.400	3.95015	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	0.13765	0.13458	0.13458	0.040	2.22586	50.0	Averaged	
1,2,4-Trichlorobenzene	0.95073	0.93421	0.93421	0.100	1.73675	50.0	Averaged	
Hexachlorobutadiene	50.0	56.55654	0.40711	0.100	-13.11308	50.0	Quadratic	
Naphthalene	2.37302	2.28333	2.28333	0.200	3.77946	50.0	Averaged	
1,2,3-Trichlorobenzene	0.92647	0.87405	0.87405	0.010	5.65837	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.54992	0.52149	0.52149	0.200	5.17068	50.0	Averaged	
95 Xylenes (total)	0.58209	0.55700	0.55700	0.100	4.31093	50.0	Averaged	
Cyclohexane	50.0	56.06352	0.63237	0.100	-12.12705	50.0	Quadratic	
Freon TF	50.0	54.06012	0.44038	0.100	-8.12023	50.0	Quadratic	
Methylcyclohexane	0.75114	0.64326	0.64326	0.100	14.36200	50.0	Averaged	
Methyl Acetate	0.44930	0.42463	0.42463	0.100	5.49113	50.0	Averaged	
Tert-butyl alcohol	1000	997	0.06011	0.005	0.27712	50.0	Linear	
Isopropyl alcohol	1000	1005	0.03527	0.005	-0.50345	50.0	Linear	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

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Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder **HS23080558**

Volatiles by EPA 8260

VOA6_443844		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene-d5				1,4-Dichlorobenzene-d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
HS23080558-01	X081122.D	625818		4.18		921494		4.97		841132		7.67		449564		9.66	
HS23080558-02	X081121.D	636102		4.18		930870		4.97		864204		7.67		469754		9.66	
VBLKW-230811	X081119.D	632725		4.18		929735		4.97		874648		7.67		467407		9.66	
VLCSW-230811	X081116.D	615054		4.18		980658		4.97		939627		7.67		532149		9.66	
MS-ZZZZZZMS	X081129.D	621082		4.18		935284		4.97		859755		7.67		484037		9.66	
ZZZZZZMSD	X081130.D	610885		4.18		924598		4.97		849630		7.67		473132		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder
HS23080558

RunID
VOA6-443843

Volatiles by EPA 8260

Run ID VOA6_443843 **Start Date** 08/11/23 **EndDate** 08/11/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:13	BFB	TUNE	BFB	X081101.D	08/11/23	1
11:33	VSTD000.25	ICAL1	VSTD000.25	X081102.D	08/11/23	1
12:14	VSTD000.5	ICAL2	VSTD000.5	X081103.D	08/11/23	1
12:35	VSTD001	ICAL3	VSTD001	X081104.D	08/11/23	1
12:55	VSTD002	ICAL4	VSTD002	X081105.D	08/11/23	1
13:15	VSTD005	ICAL5	VSTD005	X081106.D	08/11/23	1
13:36	VSTD020	ICAL6	VSTD020	X081107.D	08/11/23	1
13:56	VSTD050	ICAL7	VSTD050	X081108.D	08/11/23	1
14:17	VSTD100	ICAL8	VSTD100	X081109.D	08/11/23	1
14:37	VSTD150	ICAL9	VSTD150	X081110.D	08/11/23	1
14:57	VSTD200	ICAL	VSTD200	X081111.D	08/11/23	1
15:38	CCV	ICV	CCV	X081113.D	08/11/23	1

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project Longhorn GW Treatment Plant Bi-Weekly Samples

Workorder
HS23080558

RunID
VOA6-443844

Volatiles by EPA 8260

Run ID VOA6_443844 **Start Date** 08/11/23 **EndDate** 08/11/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:13	BFB	TUNE	BFB	X081101.D	08/11/23	1
16:39	VLCSW-230811	LCS	VLCSW-230811	X081116.D	08/11/23	1
17:41	VBLKW-230811	MBLK	VBLKW-230811	X081119.D	08/11/23	1
18:01	HS23080637-07	SAMP	ZZZZZZZZZZ	X081120.D	08/11/23	1
18:22	HS23080558-02	SAMP	Trip Blank	X081121.D	08/11/23	1
18:42	HS23080558-01	SAMP	LH18/24-	X081122.D	08/11/23	1
19:03	HS23080637-01	SAMP	ZZZZZZZZZZ	X081123.D	08/11/23	1
19:23	HS23080637-02	SAMP	ZZZZZZZZZZ	X081124.D	08/11/23	1
19:44	HS23080637-03	SAMP	ZZZZZZZZZZ	X081125.D	08/11/23	1
20:04	HS23080637-04	SAMP	ZZZZZZZZZZ	X081126.D	08/11/23	1
20:25	HS23080637-05	SAMP	ZZZZZZZZZZ	X081127.D	08/11/23	1
20:45	HS23080637-06	SAMP	ZZZZZZZZZZ	X081128.D	08/11/23	1
21:06	HS23080637-02MS	MS	ZZZZZZMS	X081129.D	08/11/23	1
21:26	HS23080637-02MSD	MSD	ZZZZZZMSD	X081130.D	08/11/23	1
21:47	CCV-END	CCV_END	CCV-END	X081131.D	08/11/23	1

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Raw Data VOA6 443843

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081101.D Page 1
Report Date: 11-Aug-2023 11:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 11-AUG-2023 11:13
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\bfb.m
Meth Date : 06-Feb-2018 12:19 pcabasca Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	133504			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	29288			15.00- 40.00	21.94
8.687	8.889	(0.000)	75	71592			30.00- 60.00	53.63
8.687	8.889	(0.000)	96	8909			5.00- 9.00	6.67
8.687	8.889	(0.000)	173	1436			0.00- 2.00	1.20
8.687	8.889	(0.000)	174	119896			50.00- 0.00	89.81
8.687	8.889	(0.000)	175	9940			5.00- 9.00	8.29
8.687	8.889	(0.000)	176	116688			95.00- 101.00	97.32
8.687	8.889	(0.000)	177	8151			5.00- 9.00	6.99

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.94
75	30.00 - 60.00% of mass 95	53.63
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	1.08 (1.20)
174	Greater than 50.00% of mass 95	89.81
175	5.00 - 9.00% of mass 174	7.45 (8.29)
176	95.00 - 101.00% of mass 174	87.40 (97.32)
177	5.00 - 9.00% of mass 176	6.11 (6.99)

Data File: X081101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	1489	66.90	454	96.00	8909	139.70	97
37.00	9334	68.00	15426	97.10	317	140.90	1519
38.00	8002	69.00	16323	103.80	1007	141.70	221
39.00	2897	69.90	960	104.70	209	142.90	1486
40.00	2340	70.10	1008	105.90	671	143.70	56
40.90	128	70.90	129	106.80	182	145.70	208
43.10	411	71.80	501	109.90	155	147.70	275
44.00	3487	73.00	6125	111.00	302	148.90	79
45.00	1525	74.00	26376	111.70	142	149.80	173
46.00	235	75.00	71592	112.60	141	151.70	54
47.00	1767	76.00	6877	113.00	142	152.60	72
47.90	1117	77.00	1148	114.90	321	154.00	61
49.00	6205	78.00	937	115.60	465	154.80	330
50.00	29288	78.90	6479	116.10	489	156.90	430
51.10	8526	79.90	1839	116.80	1358	158.70	315
52.10	216	80.90	7153	117.70	508	160.90	203
55.10	453	81.90	1248	118.80	884	169.30	52
55.90	2727	82.80	135	123.90	264	170.20	191
57.00	4451	83.20	170	125.00	121	171.20	109
57.90	475	86.10	234	127.00	76	172.90	1436
60.00	1216	87.00	5967	127.80	678	173.90	119896
61.00	6884	87.90	5466	128.60	243	174.90	9940
62.00	7158	88.70	396	129.80	454	175.90	116688
63.00	6527	90.90	677	130.90	241	176.90	8151
63.80	288	91.90	4406	135.00	136	189.20	58
64.20	280	93.00	5676	136.90	208	277.90	56
65.00	63	94.00	15567	137.60	65	280.80	137
65.80	79	95.00	133504	138.80	118		

Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081101.d Page 1

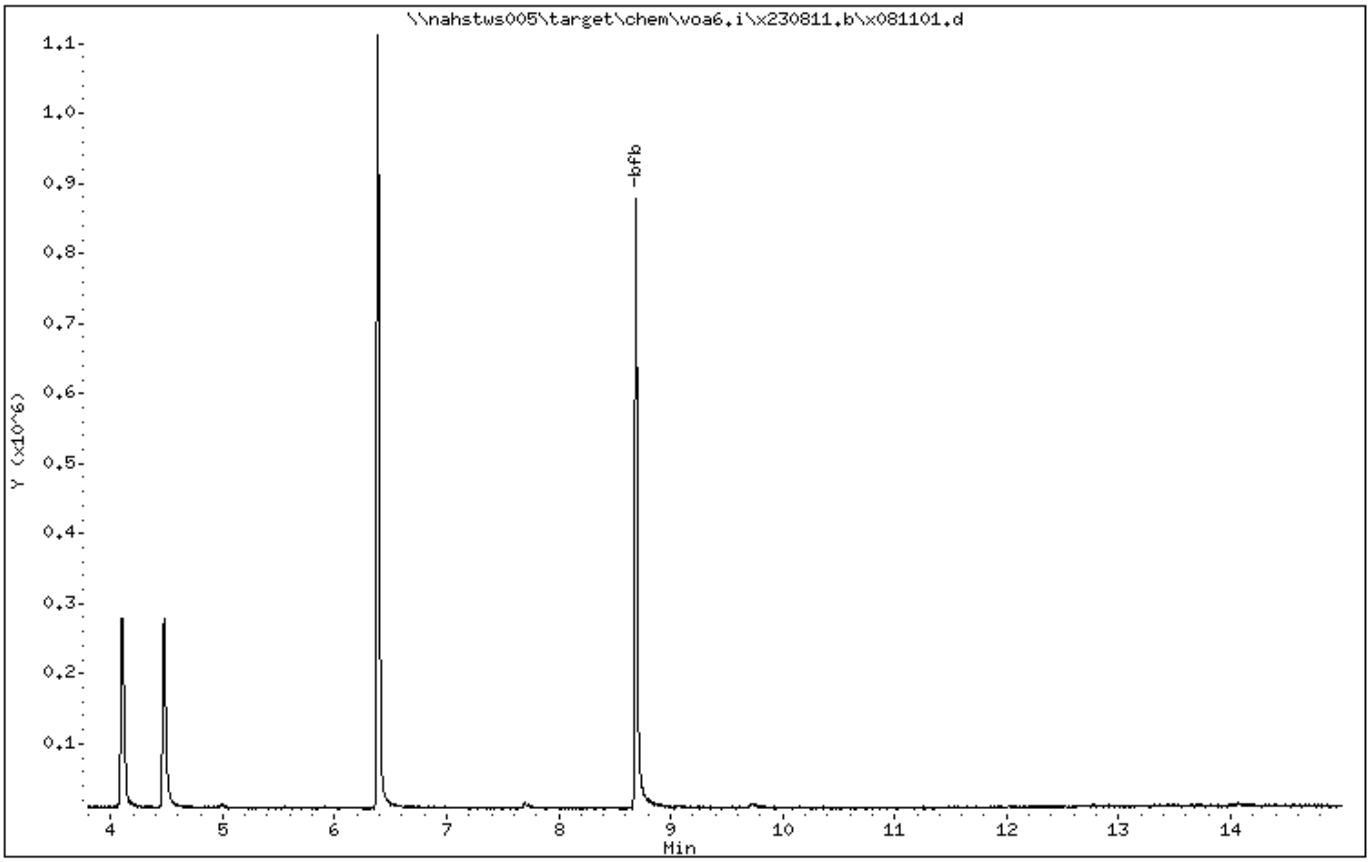
Date : 11-AUG-2023 11:13

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081101.d
Inj Date : 11-AUG-2023 11:13
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081102.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 11-AUG-2023 11:33
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 13:56 Cal File: X081108.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.181	4.181	(1.000)	626188	50.0000	
135	1,4-Dioxane	88	5.628	5.628	(1.346)	382	5.00000	4.79(M)
140	1,3-Butadiene	54	1.175	1.175	(0.281)	1199	0.25000	0.18
25	Methacrylonitrile	41	3.878	3.878	(0.927)	1085	0.25000	0.17
12	Isobutyl Alcohol	43	4.710	4.710	(1.126)	2698	5.00000	2.74(T)
13	Acetonitrile	39	2.210	2.210	(0.528)	2035	2.50000	2.10
14	Allyl Chloride	41	2.210	2.210	(0.528)	5209	0.25000	0.27
136	n-Hexane	57	2.783	2.783	(0.666)	1292	0.25000	
145	alpha-Methylstyrene	118	9.279	9.279	(0.960)	2569	0.25000	0.23
200	Dimethyl Disulfide	94	6.209	6.209	(0.810)	2212	0.25000	0.17
139	Diethyl ether	59	1.767	1.767	(0.423)	1799	0.25000	0.32
49	Ethyl Methacrylate	69	6.730	6.730	(1.355)	1234	0.25000	0.13
150	Allyl alcohol	57	2.783	2.783	(0.666)	1292	5.00000	
166	1,2,3-Trimethylbenzene	105	9.741	9.741	(1.008)	5876	0.25000	0.24
162	Butyl acrylate	55	8.305	8.305	(1.083)	1916	0.25000	0.12
2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	974	0.25000	0.83
3	Chloromethane	50	1.089	1.089	(0.260)	2037	0.25000	0.33
5	Vinyl Chloride	62	1.149	1.149	(0.275)	1533	0.25000	0.20
6	Bromomethane	94	1.344	1.344	(0.321)	1900	0.25000	0.46
7	Chloroethane	64	1.419	1.419	(0.339)	1390	0.25000	0.28

8	Trichlorofluoromethane	101	1.561	1.561 (0.373)	1655	0.25000	0.15
9	Acrolein	56	1.336	1.336 (0.320)	816	0.50000	1.34(T)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	10 Acetone	43	1.985	1.985	(0.475)	6311	0.50000	
	11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	1653	0.25000	0.27
	15 Iodomethane	142	2.033	2.033	(0.486)	1065	0.50000	5.70(T)
	16 Acrylonitrile	53	2.551	2.551	(0.610)	959	0.50000	0.32
	17 Methylene Chloride	84	2.307	2.307	(0.552)	7629	0.25000	1.00
	18 Methyl tert-butyl ether	73	2.547	2.547	(0.609)	5833	0.25000	0.27
	19 Carbon Disulfide	76	2.075	2.075	(0.496)	8609	0.50000	0.47
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	1691	0.25000	0.24
	22 1,1-Dichloroethane	63	2.933	2.933	(0.701)	4477	0.25000	0.33(T)
	27 cis-1,2-Dichloroethene	96	3.548	3.548	(0.849)	1479	0.25000	0.21
	28 Chloroform	83	3.915	3.915	(0.936)	3802	0.25000	0.32
$	30 Dibromofluoromethane	113	4.114	4.114	(0.984)	2815	0.25000	
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	1651	0.25000	0.17
	32 1,1-Dichloropropene	75	4.185	4.185	(0.842)	40609	0.25000	5.22
	33 1,2-Dichloroethane	62	4.582	4.582	(0.922)	2649	0.25000	0.28
	34 Carbon Tetrachloride	117	4.181	4.181	(0.842)	56019	0.25000	6.83
$	35 1,2-Dichloroethane-d4	65	4.492	4.492	(1.074)	3418	0.25000	
*	36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	987045	50.0000	
	37 Benzene	78	4.526	4.526	(0.911)	5992	0.25000	0.24
	38 Trichloroethene	130	5.212	5.212	(1.049)	1686	0.25000	0.24
	44 Dibromomethane	93	5.553	5.553	(1.118)	1301	0.25000	0.27
	45 4-Methyl-2-Pentanone	43	6.352	6.352	(0.828)	3113	0.50000	0.46
	46 cis-1,3-Dichloropropene	75	6.161	6.161	(1.240)	2810	0.25000	0.27
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	938711	50.0000	
$	48 Toluene-d8	98	6.401	6.401	(0.835)	10047	0.25000	0.45
	50 Toluene	91	6.461	6.461	(0.843)	7422	0.25000	0.28
	52 2-Hexanone	43	7.132	7.132	(0.930)	1169	0.50000	0.25
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	1472	0.25000	0.28
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	2926	0.25000	0.27
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	2180	0.25000	0.28
	56 Tetrachloroethene	164	6.937	6.937	(0.905)	775	0.25000	0.14
	57 1,2-Dibromoethane	107	7.281	7.281	(0.950)	1731	0.25000	0.27
	58 1-Chlorohexane	55	7.671	7.671	(1.544)	8794	0.25000	1.53
	59 Chlorobenzene	112	7.698	7.698	(1.004)	4792	0.25000	0.26
	60 1,1,1,2-Tetrachloroethane	131	7.784	7.784	(1.015)	1491	0.25000	0.21
	61 Ethylbenzene	106	7.810	7.810	(1.019)	2470	0.25000	0.27
	62 m,p-Xylenes	106	7.919	7.919	(1.033)	5302	0.50000	0.46
	63 o-Xylene	106	8.267	8.267	(1.078)	3049	0.25000	0.27
	64 Styrene	104	8.309	8.309	(1.084)	3334	0.25000	0.17
	67 Isopropylbenzene	105	8.571	8.571	(1.118)	6419	0.25000	0.23
$	69 4-Bromofluorobenzene	95	8.710	8.710	(1.136)	7582	0.25000	1.09
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	510942	50.0000	
	71 1,2,3-Trichloropropane	75	8.882	8.882	(0.919)	2146	0.25000	0.35
	73 n-Propylbenzene	91	8.931	8.931	(0.924)	6502	0.25000	0.21
	74 Bromobenzene	156	8.833	8.833	(0.914)	1137	0.25000	0.13
	75 1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	5894	0.25000	0.26
	76 2-Chlorotoluene	91	8.991	8.991	(0.931)	5547	0.25000	0.28
	77 4-Chlorotoluene	91	9.115	9.115	(0.943)	5886	0.25000	0.26
	78 tert-Butylbenzene	119	9.343	9.343	(0.967)	4589	0.25000	0.24
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	6557	0.25000	0.28
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	6673	0.25000	0.25
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	6091	0.25000	0.25

83 1,3-Dichlorobenzene	146	9.613	9.613 (0.995)	3071	0.25000	0.21
84 1,4-Dichlorobenzene	146	9.677	9.677 (1.002)	4795	0.25000	0.30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	87 n-Butylbenzene	91	10.037	10.037	(1.039)	3022	0.25000	2.14
	88 1,2-Dichlorobenzene	146	10.022	10.022	(1.037)	3447	0.25000	0.23
	90 1,2,4-Trichlorobenzene	180	11.401	11.401	(1.180)	2133	0.25000	0.21
	92 Naphthalene	128	11.615	11.615	(1.202)	6120	0.25000	0.25
	93 1,2,3-Trichlorobenzene	180	11.772	11.772	(1.218)	2722	0.25000	0.28
M	94 1,2-Dichloroethylene (total)	96				3170	0.50000	
M	95 Xylenes (total)	106				8351	0.75000	
	141 Cyclohexane	56	4.178	4.178	(0.999)	12532	0.25000	3.27
	138 Freon TF	101	1.925	1.925	(0.460)	806	0.25000	1.26
	147 Methylcyclohexane	55	5.366	5.366	(1.080)	956	0.25000	0.06
	146 Methyl Acetate	43	2.258	2.258	(0.540)	2769	0.25000	0.49

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.

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Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081102.d

Page 1

Date : 11-AUG-2023 11:33

Client ID: VSTD000.25

Instrument: voa6.i

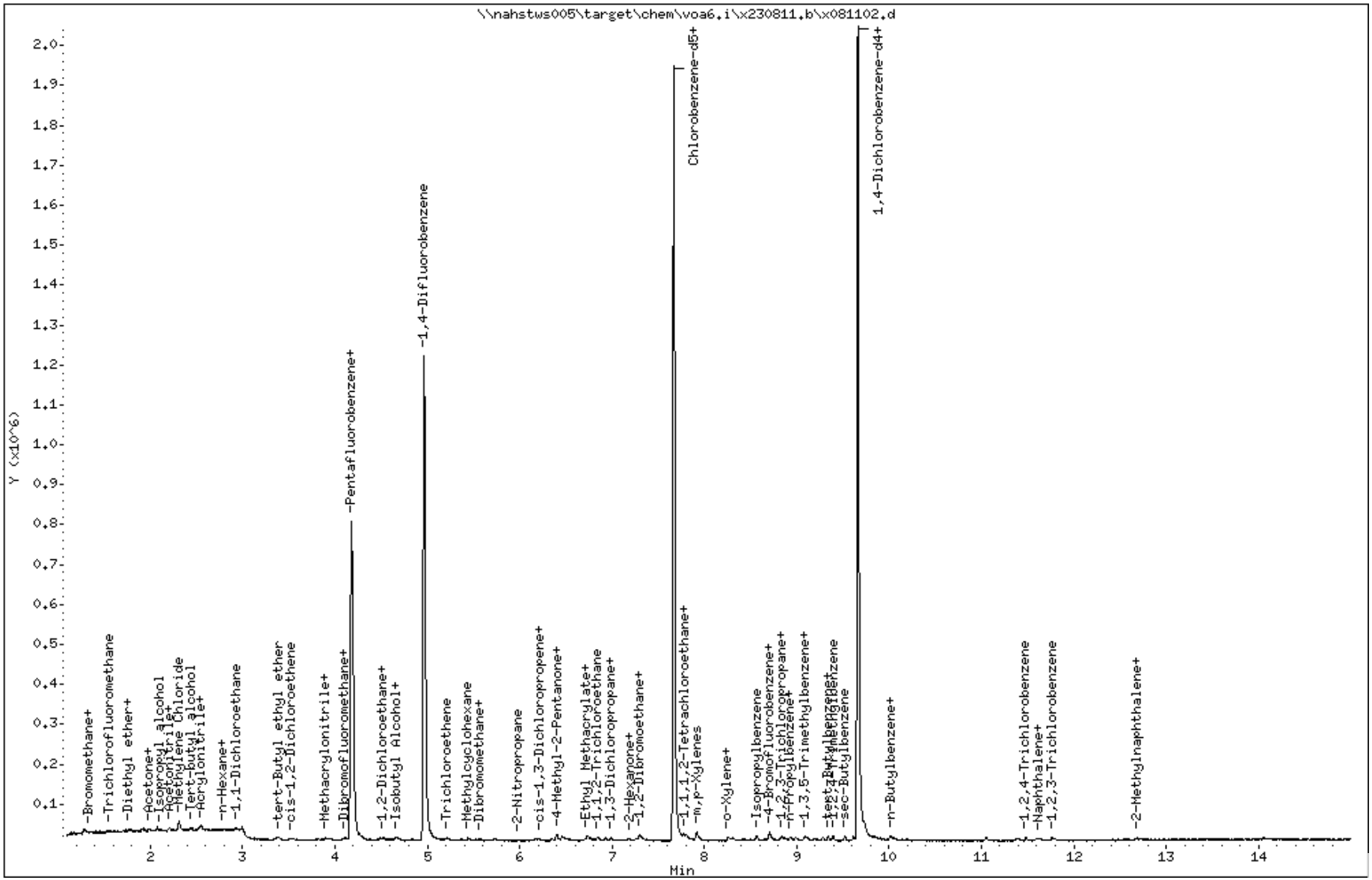
Sample Info: VSTD000.25;VSTD000.25;1;1;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18

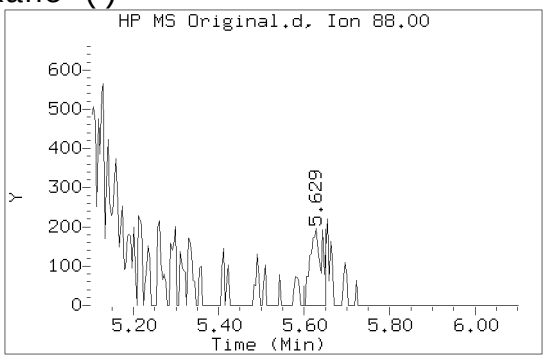


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LabSampID : VSTD000.25

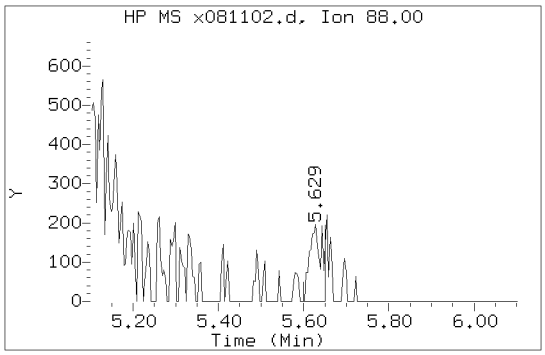
1,4-Dioxane ()

Reason Code:

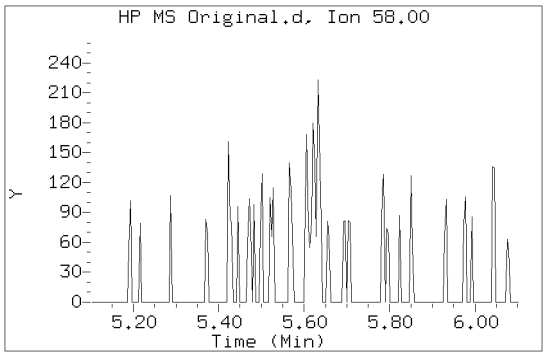
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12-Aug-2023
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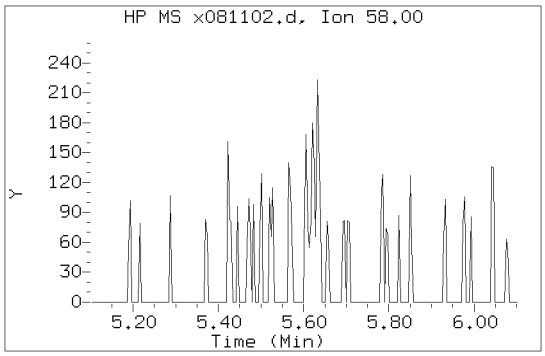
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22:49



AFTER
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AREA
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HEIGHT
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12-Aug-2023
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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081103.D Page 1
Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081103.D
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Inj Date : 11-AUG-2023 12:14
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 11:33 Cal File: X081102.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	606565	50.0000	
135 1,4-Dioxane	88	5.617	5.617	(1.343)	825	10.0000	10.70(M)
140 1,3-Butadiene	54	1.171	1.171	(0.280)	3838	0.50000	0.61(M)
25 Methacrylonitrile	41	3.878	3.878	(0.927)	3257	0.50000	0.53(M)
12 Isobutyl Alcohol	43	4.699	4.699	(1.124)	10205	10.0000	10.73(M)
13 Acetonitrile	39	2.202	2.202	(0.527)	4428	5.00000	4.73(M)
14 Allyl Chloride	41	2.202	2.202	(0.527)	10300	0.50000	0.55(M)
4 Propionitrile	54	3.720	3.720	(0.890)	4117	5.00000	4.87(M)
136 n-Hexane	57	2.779	2.779	(0.665)	4056	0.50000	(M)
72 trans-1,4-Dichloro-2-butene	53	8.950	8.950	(1.167)	1260	0.50000	0.55(M)
23 Chloroprene	53	1.782	1.782	(0.426)	1459	0.50000	0.56(M)
145 alpha-Methylstyrene	118	9.272	9.272	(0.960)	5954	0.50000	0.57(M)
200 Dimethyl Disulfide	94	6.209	6.209	(0.810)	5435	0.50000	0.45
139 Diethyl ether	59	1.767	1.767	(0.423)	2930	0.50000	0.54(M)
130 Ethyl Acetate	43	3.717	3.717	(0.889)	3740	0.50000	0.53(M)
40 Methyl Methacrylate	41	5.640	5.640	(1.349)	2840	0.50000	0.50
49 Ethyl Methacrylate	69	6.805	6.805	(1.371)	4461	0.50000	0.51(H)
132 n-Butanol	56	5.370	5.370	(1.284)	1373	10.0000	75.88(TM)
142 Tetrahydrofuran	42	3.889	3.889	(0.930)	1419	1.00000	1.19(M)
150 Allyl alcohol	57	2.779	2.779	(0.665)	4860	10.0000	0.28

166	1,2,3-Trimethylbenzene	105	9.737	9.737 (1.008)	12507	0.50000	0.55
131	Methyl Acrylate	55	3.780	3.780 (0.904)	3259	0.50000	0.54(M)

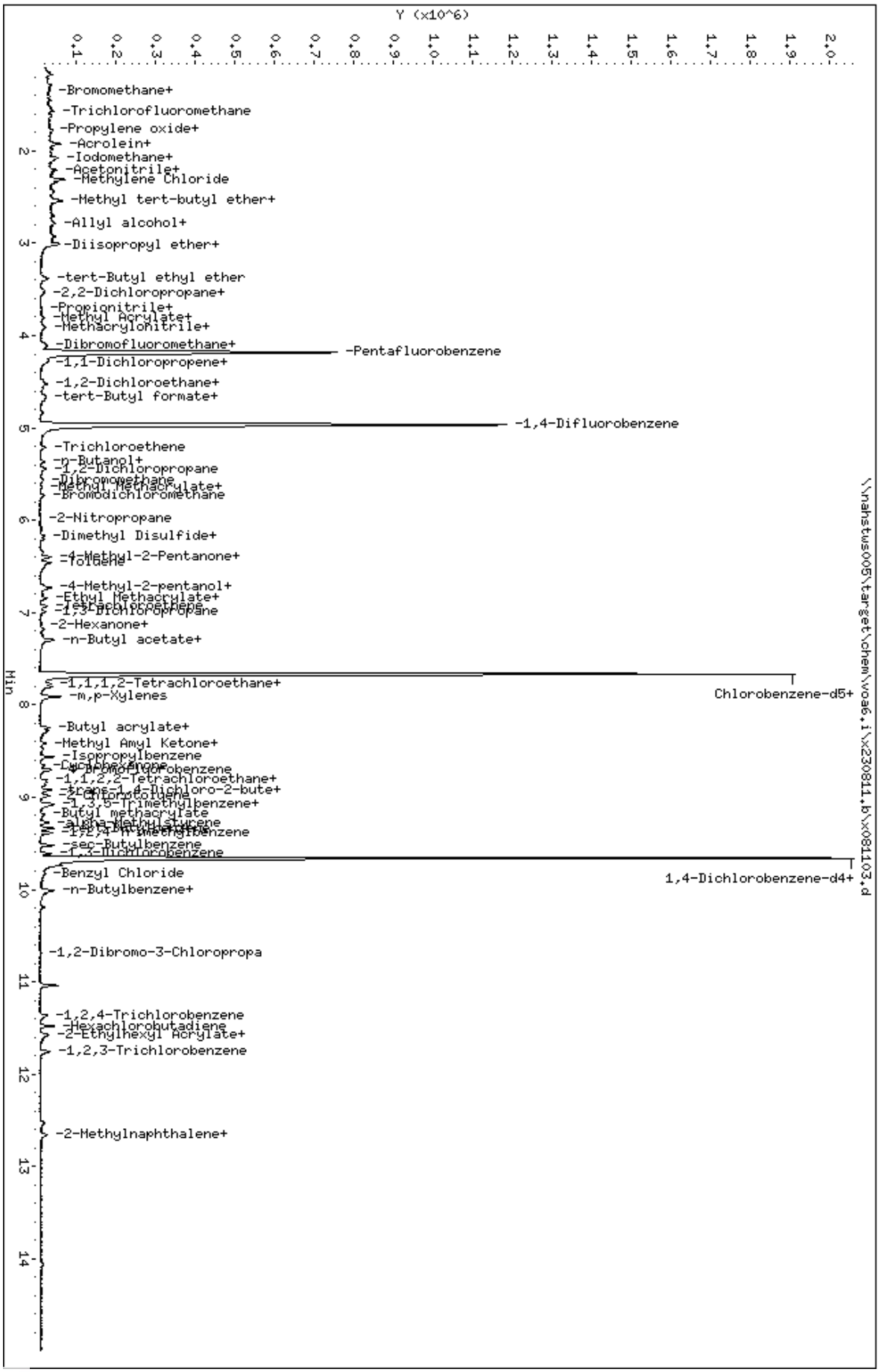
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	162 Butyl acrylate	55	8.286	8.286	(1.081)	7408	0.50000	0.50(M)
	2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	3407	0.50000	1.27(M)
	3 Chloromethane	50	1.085	1.085	(0.260)	3482	0.50000	0.58(M)
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	4404	0.50000	0.60(M)
	6 Bromomethane	94	1.344	1.344	(0.321)	2137	0.50000	0.54(M)
	7 Chloroethane	64	1.411	1.411	(0.338)	2768	0.50000	0.58(M)
	8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	6710	0.50000	0.64(M)
	9 Acrolein	56	1.861	1.861	(0.445)	323	1.00000	(TM)
	10 Acetone	43	1.988	1.988	(0.476)	8080	1.00000	(M)
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	3414	0.50000	0.58(M)
	15 Iodomethane	142	2.037	2.037	(0.487)	2898	1.00000	5.96(T)
	16 Acrylonitrile	53	2.551	2.551	(0.610)	3027	1.00000	1.07(M)
	17 Methylene Chloride	84	2.303	2.303	(0.551)	3889	0.50000	0.52(M)
	18 Methyl tert-butyl ether	73	2.543	2.543	(0.608)	11988	0.50000	0.57
	19 Carbon Disulfide	76	2.078	2.078	(0.497)	18059	1.00000	1.03(M)
	20 trans-1,2-Dichloroethene	96	2.539	2.539	(0.607)	3848	0.50000	0.56(M)
	21 Vinyl Acetate	43	3.019	3.019	(0.722)	22253	1.00000	1.10(M)
	22 1,1-Dichloroethane	63	2.926	2.926	(0.700)	7346	0.50000	0.57(M)
	24 2-Butanone	43	3.702	3.702	(0.885)	2017	1.00000	0.89(M)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	4612	0.50000	0.51(M)
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	3574	0.50000	0.54(M)
	28 Chloroform	83	3.908	3.908	(0.935)	5756	0.50000	0.51(M)
	29 Bromochloromethane	128	3.803	3.803	(0.909)	1872	0.50000	0.50(M)
$	30 Dibromofluoromethane	113	4.110	4.110	(0.983)	4322	0.50000	(M)
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	4852	0.50000	0.53(M)
	32 1,1-Dichloropropene	75	4.290	4.290	(0.864)	4132	0.50000	0.56(MH)
	33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	4942	0.50000	0.55(M)
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	4492	0.50000	0.57(MH)
$	35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.074)	4095	0.50000	(M)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	936474	50.0000	
	37 Benzene	78	4.523	4.523	(0.911)	12962	0.50000	0.56(M)
	38 Trichloroethene	130	5.212	5.212	(1.050)	3802	0.50000	0.57(M)
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	5036	0.50000	0.58(M)
	41 2-Chloroethylvinyl ether	63	6.078	6.078	(1.224)	2443	1.00000	1.11(M)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	3864	0.50000	0.59(M)
	44 Dibromomethane	93	5.565	5.565	(1.121)	2538	0.50000	0.57
	45 4-Methyl-2-Pentanone	43	6.352	6.352	(0.828)	6765	1.00000	1.03(M)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	5702	0.50000	0.58(M)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	907144	50.0000	
$	48 Toluene-d8	98	6.397	6.397	(0.834)	14098	0.50000	0.66(M)
	50 Toluene	91	6.457	6.457	(0.842)	14402	0.50000	0.56(M)
	51 trans-1,3-Dichloropropene	75	6.704	6.704	(1.350)	4833	0.50000	0.58(M)
	52 2-Hexanone	43	7.139	7.139	(0.931)	4310	1.00000	0.98
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	2765	0.50000	0.54(M)
	54 1,3-Dichloropropane	76	6.989	6.989	(0.912)	5853	0.50000	0.56
	55 Dibromochloromethane	129	7.177	7.177	(0.936)	3861	0.50000	0.53(M)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	2916	0.50000	0.55(M)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	3314	0.50000	0.53(M)
	58 1-Chlorohexane	55	7.698	7.698	(1.550)	2827	0.50000	0.52(MH)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	10027	0.50000	0.57(M)
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	3665	0.50000	0.54(M)
	61 Ethylbenzene	106	7.806	7.806	(1.018)	4890	0.50000	0.56(M)

62 m,p-Xylenes	106	7.911	7.911 (1.032)	12402	1.00000	1.12(M)
63 o-Xylene	106	8.245	8.245 (1.075)	5910	0.50000	0.54(M)

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	64	Styrene	104	8.286	8.286	(1.081)	9494	0.50000	0.52(M)
	66	Bromoform	173	8.421	8.421	(1.098)	2332	0.50000	0.47(TM)
	67	Isopropylbenzene	105	8.564	8.564	(1.117)	16385	0.50000	0.60(M)
	68	1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	4493	0.50000	0.57(M)
$	69	4-Bromofluorobenzene	95	8.699	8.699	(1.134)	8224	0.50000	1.19(M)
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	483591	50.0000	
	71	1,2,3-Trichloropropane	75	8.878	8.878	(0.919)	3166	0.50000	0.54(M)
	73	n-Propylbenzene	91	8.923	8.923	(0.924)	17092	0.50000	0.59(M)
	74	Bromobenzene	156	8.818	8.818	(0.913)	4612	0.50000	0.59(M)
	75	1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	12006	0.50000	0.57(M)
	76	2-Chlorotoluene	91	8.983	8.983	(0.930)	10667	0.50000	0.58(M)
	77	4-Chlorotoluene	91	9.088	9.088	(0.941)	10970	0.50000	0.52(M)
	78	tert-Butylbenzene	119	9.336	9.336	(0.966)	10385	0.50000	0.57(M)
	79	1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	12812	0.50000	0.59(M)
	81	sec-Butylbenzene	105	9.523	9.523	(0.986)	13358	0.50000	0.54(M)
	82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	13394	0.50000	0.60(M)
	83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	7795	0.50000	0.56(M)
	84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	8042	0.50000	0.54(M)
	86	Benzyl Chloride	91	9.831	9.831	(1.282)	6104	0.50000	0.47(M)
	87	n-Butylbenzene	91	10.011	10.011	(1.036)	10518	0.50000	2.48(M)
	88	1,2-Dichlorobenzene	146	10.007	10.007	(1.036)	7410	0.50000	0.53(M)
	89	1,2-Dibromo-3-Chloropropane	155	10.689	10.689	(1.106)	676	0.50000	0.50(M)
	90	1,2,4-Trichlorobenzene	180	11.368	11.368	(1.177)	4663	0.50000	0.50(M)
	91	Hexachlorobutadiene	225	11.473	11.473	(1.187)	1914	0.50000	(M)
	92	Naphthalene	128	11.585	11.585	(1.199)	12804	0.50000	0.55(M)
	93	1,2,3-Trichlorobenzene	180	11.754	11.754	(1.216)	5452	0.50000	0.60(M)
M	94	1,2-Dichloroethylene (total)	96				7422	1.00000	
M	95	Xylenes (total)	106				18312	1.50000	
	141	Cyclohexane	56	4.129	4.129	(0.987)	4440	0.50000	2.36(MH)
	138	Freon TF	101	1.921	1.921	(0.459)	3204	0.50000	1.68(M)
	147	Methylcyclohexane	55	5.373	5.373	(1.082)	7626	0.50000	0.54(M)
	146	Methyl Acetate	43	2.243	2.243	(0.537)	3113	0.50000	0.57(M)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Column phase: DB624

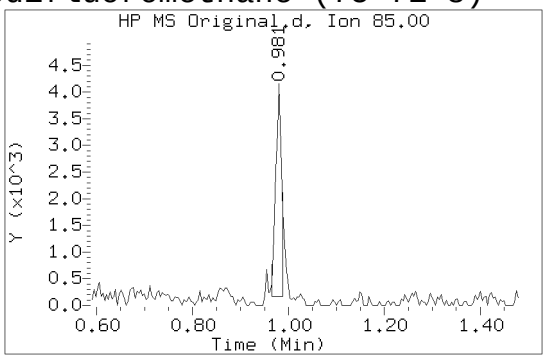
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Operator: PC
Column diameter: 0.18

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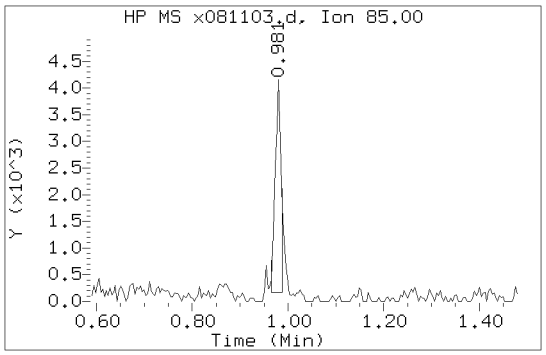
Dichlorodifluoromethane (75-71-8)

Reason Code:

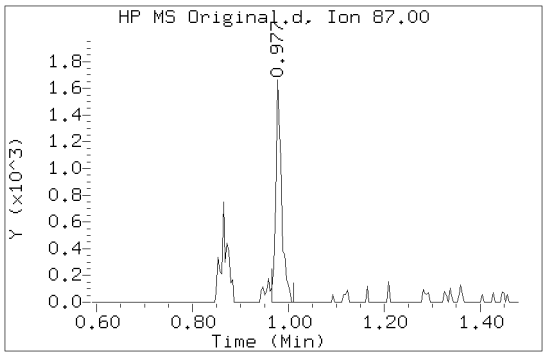
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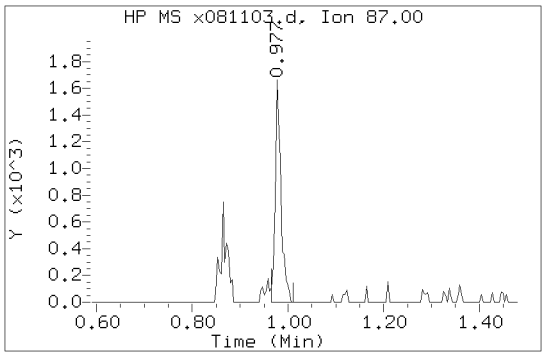
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BEFORE
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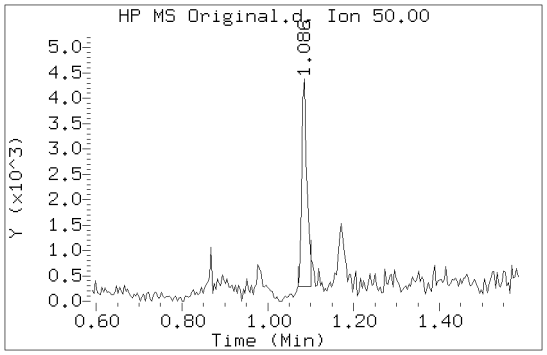
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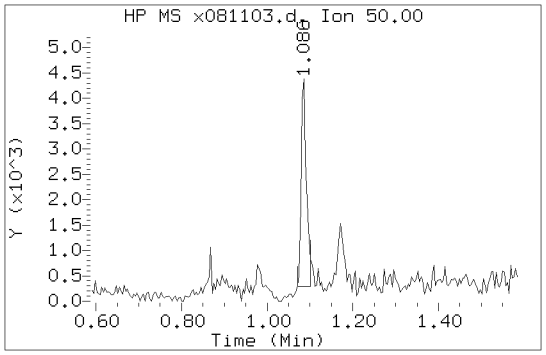
Chloromethane (74-87-3)

Reason Code:

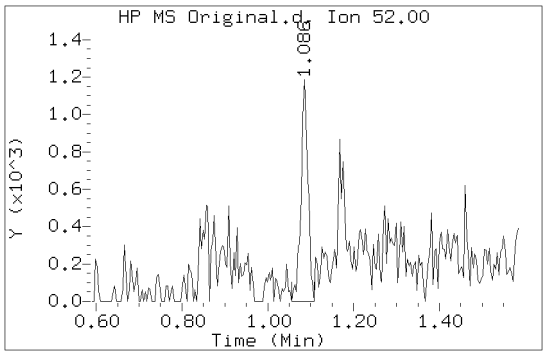
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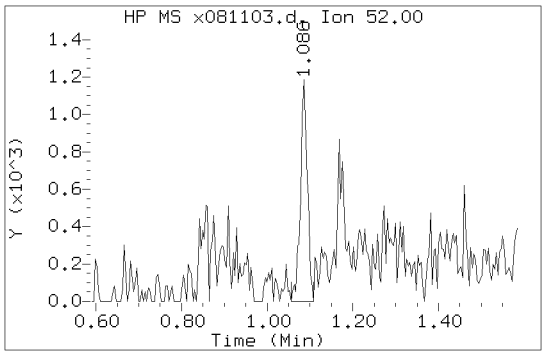
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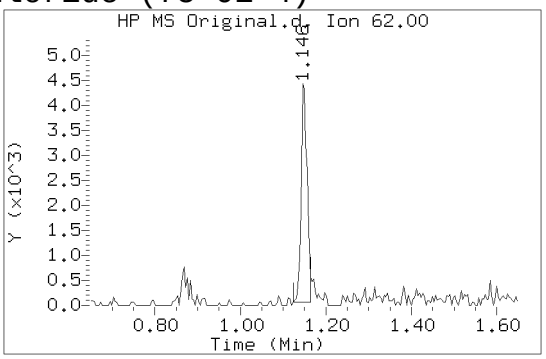
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LabSampID : VSTD000.5

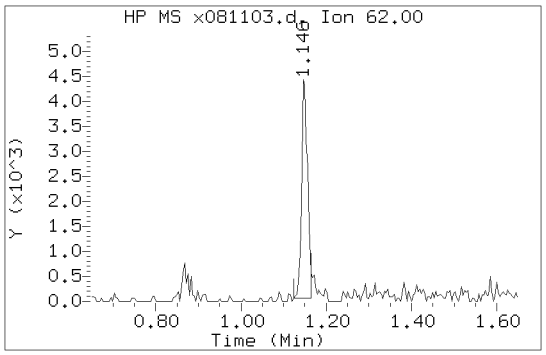
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BEFORE
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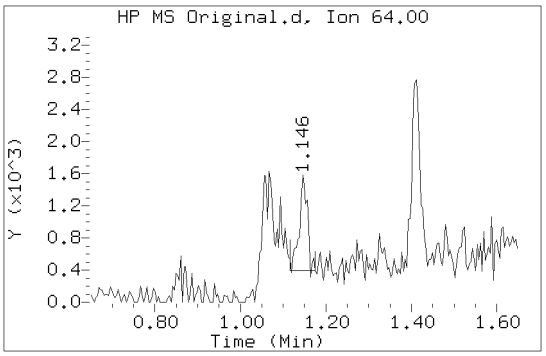


Reason Code:

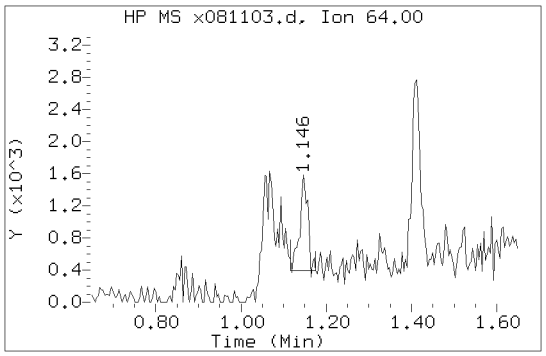
AFTER
MASS
62
AREA
4404
HEIGHT
4375
12-Aug-2023
22:44



BEFORE
MASS
64
AREA
1641
HEIGHT
1196
12-Aug-2023
22:44

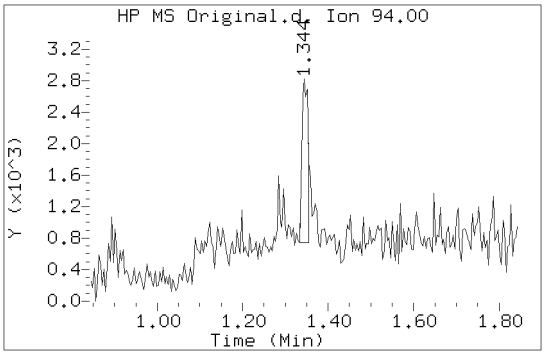


AFTER
MASS
64
AREA
1641
HEIGHT
1196
12-Aug-2023
22:44



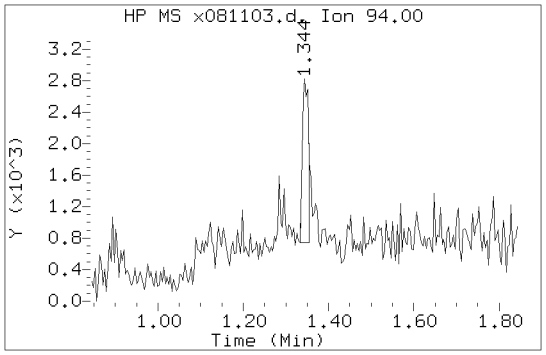
Bromomethane (74-83-9)

BEFORE
MASS
94
AREA
2137
HEIGHT
2080
12-Aug-2023
22:44

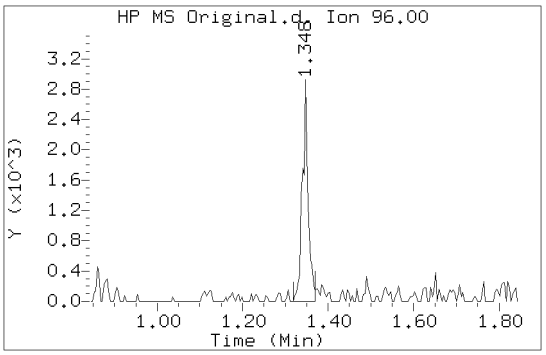


Reason Code:

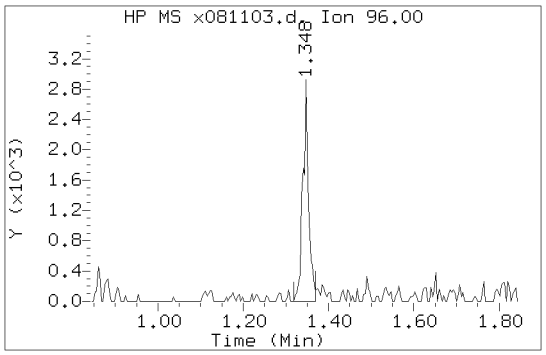
AFTER
MASS
94
AREA
2137
HEIGHT
2080
12-Aug-2023
22:44



BEFORE
MASS
96
AREA
2813
HEIGHT
2924
12-Aug-2023
22:44



AFTER
MASS
96
AREA
2813
HEIGHT
2924
12-Aug-2023
22:44

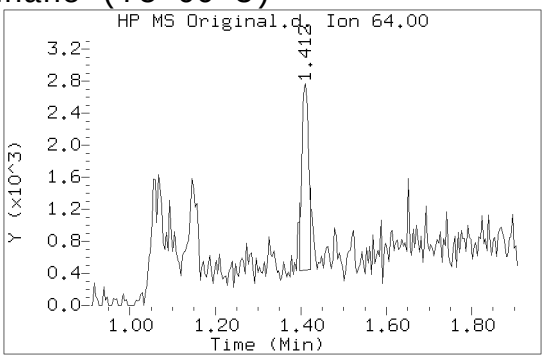


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InstruID : voa6.i
LabSampID : VSTD000.5

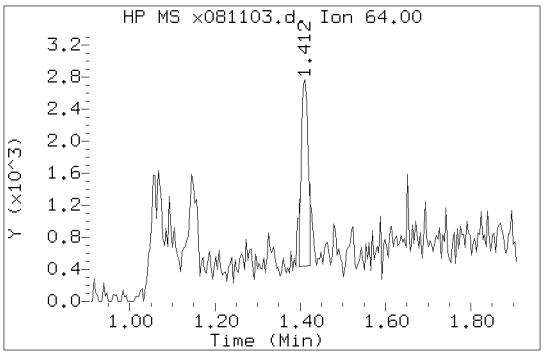
Chloroethane (75-00-3)

Reason Code:

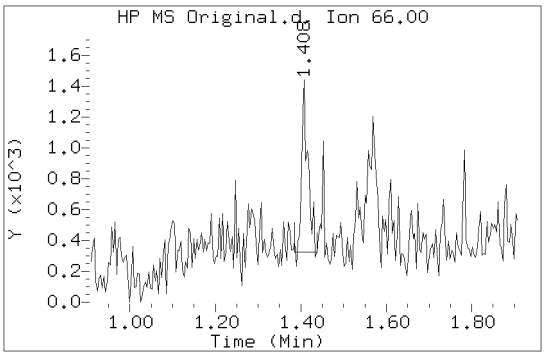
BEFORE
MASS
64
AREA
2768
HEIGHT
2330
12-Aug-2023
22:44



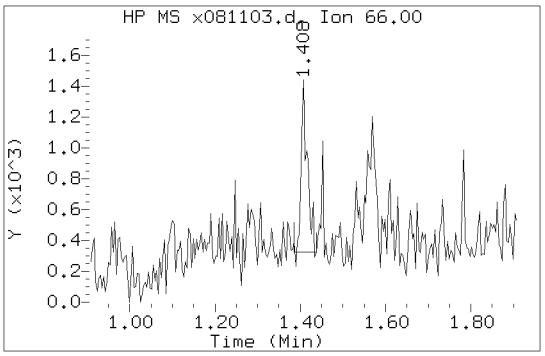
AFTER
MASS
64
AREA
2768
HEIGHT
2330
12-Aug-2023
22:44



BEFORE
MASS
66
AREA
1131
HEIGHT
1114
12-Aug-2023
22:44



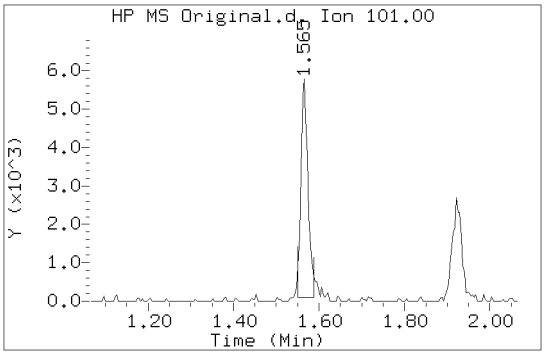
AFTER
MASS
66
AREA
1131
HEIGHT
1114
12-Aug-2023
22:44



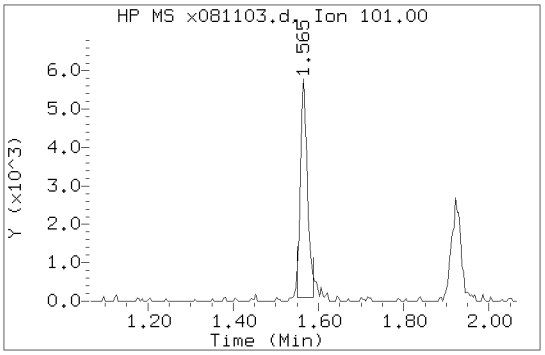
Trichlorofluoromethane (75-69-4)

Reason Code:

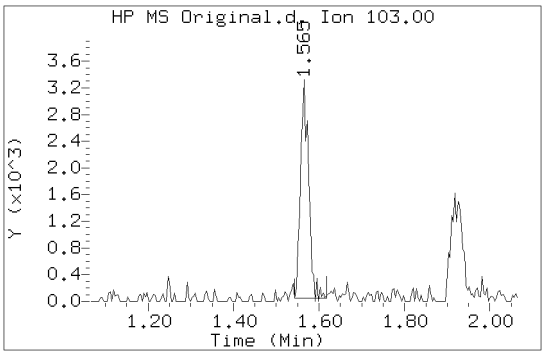
BEFORE
MASS
101
AREA
6710
HEIGHT
5688
12-Aug-2023
22:44



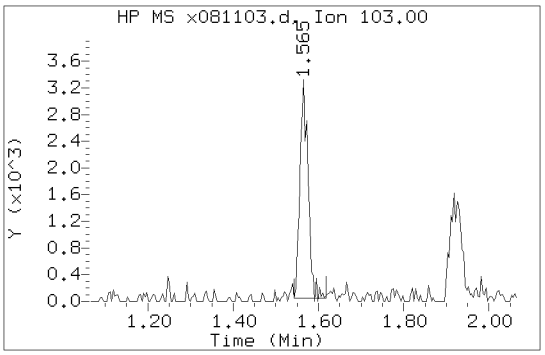
AFTER
MASS
101
AREA
6710
HEIGHT
5688
12-Aug-2023
22:44



BEFORE
MASS
103
AREA
4414
HEIGHT
3270
12-Aug-2023
22:44



AFTER
MASS
103
AREA
4414
HEIGHT
3270
12-Aug-2023
22:44

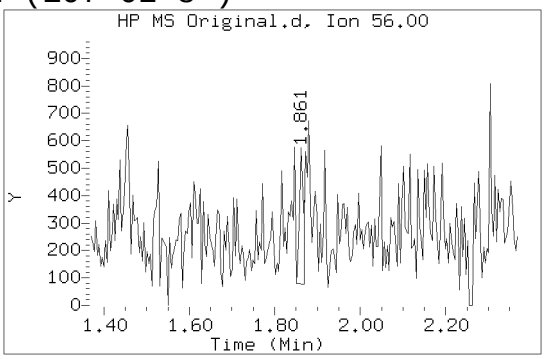


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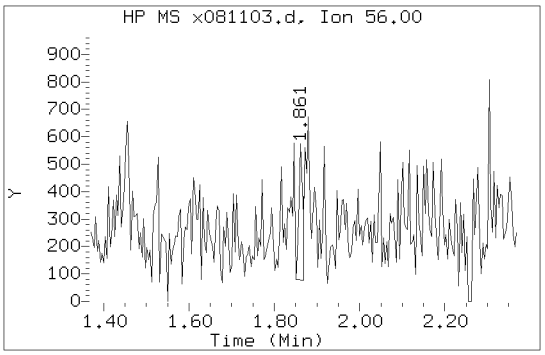
Acrolein (107-02-8)

Reason Code:

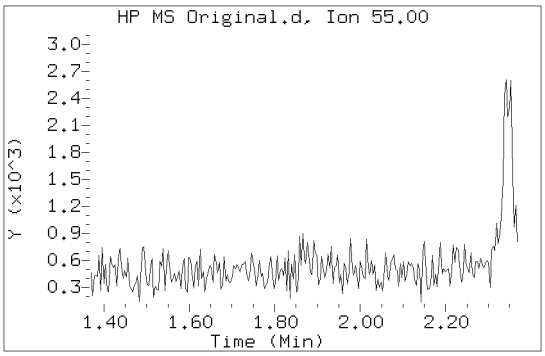
BEFORE
MASS
56
AREA
323
HEIGHT
496
12-Aug-2023
22:44



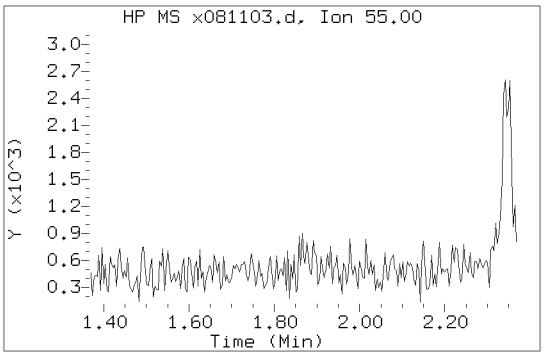
AFTER
MASS
56
AREA
323
HEIGHT
496
12-Aug-2023
22:44



BEFORE
MASS
55
AREA
0
HEIGHT
0
12-Aug-2023
22:44



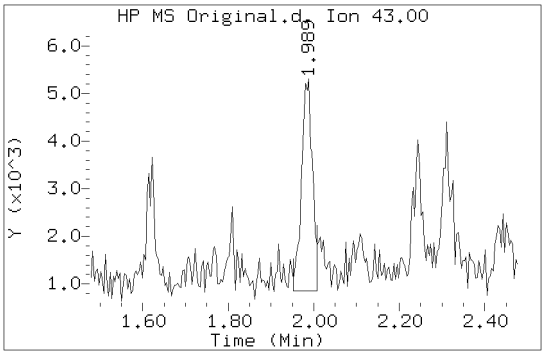
AFTER
MASS
55
AREA
0
HEIGHT
0
12-Aug-2023
22:44



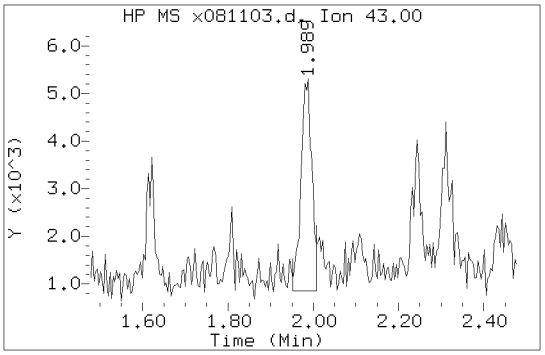
Acetone (67-64-1)

Reason Code:

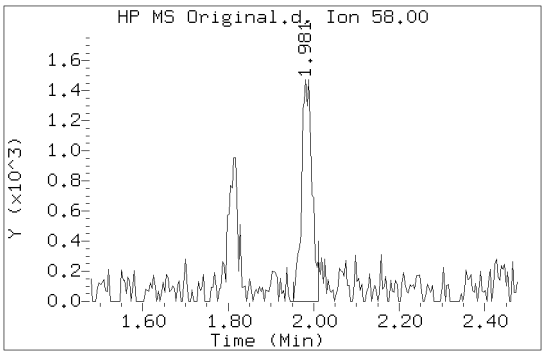
BEFORE
MASS
43
AREA
8080
HEIGHT
4452
12-Aug-2023
22:44



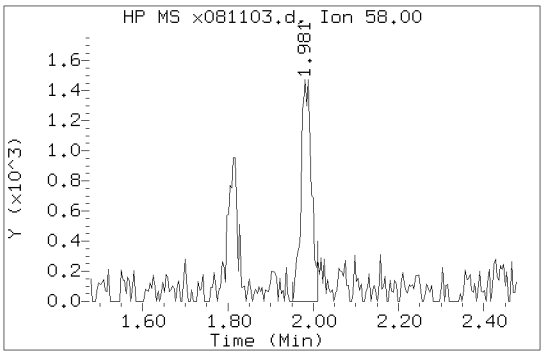
AFTER
MASS
43
AREA
8080
HEIGHT
4452
12-Aug-2023
22:44



BEFORE
MASS
58
AREA
2589
HEIGHT
1473
12-Aug-2023
22:44



AFTER
MASS
58
AREA
2589
HEIGHT
1473
12-Aug-2023
22:44

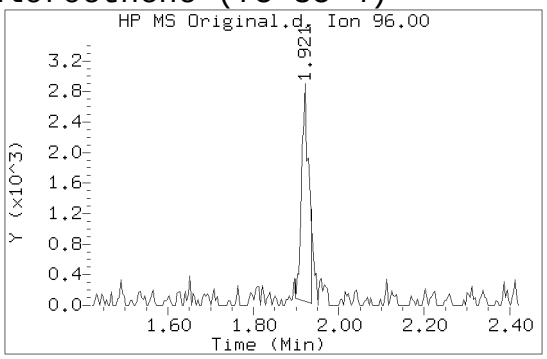


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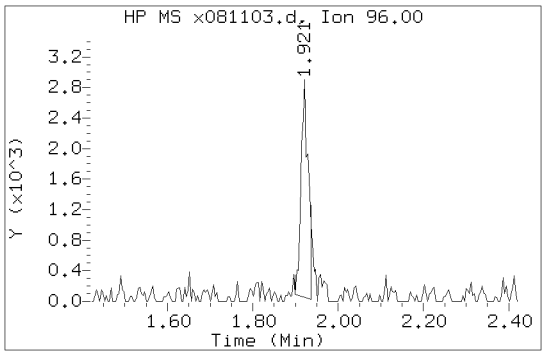
1,1-Dichloroethene (75-35-4)

Reason Code:

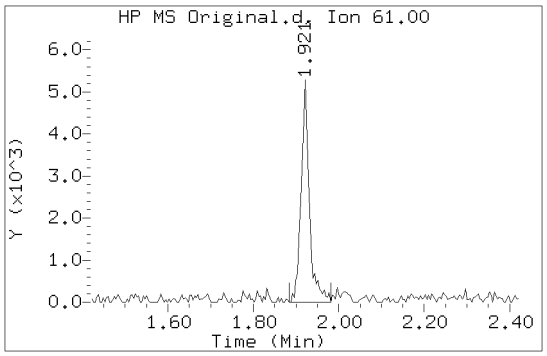
BEFORE
MASS
96
AREA
3414
HEIGHT
2850
12-Aug-2023
22:44



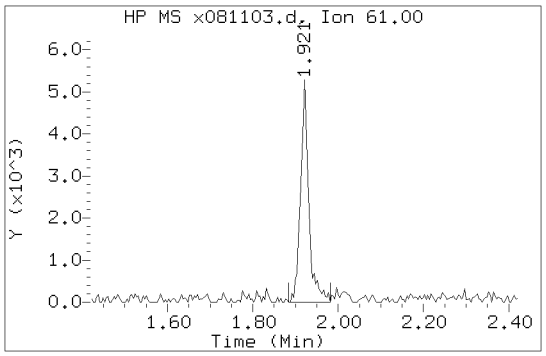
AFTER
MASS
96
AREA
3414
HEIGHT
2850
12-Aug-2023
22:44



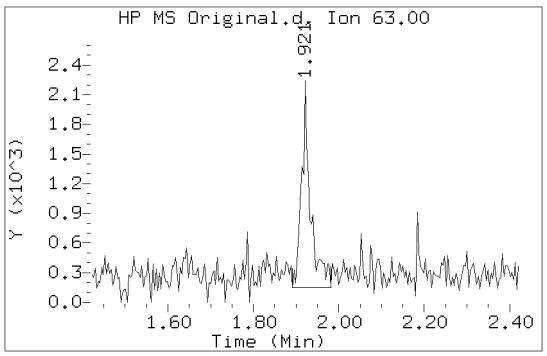
BEFORE
MASS
61
AREA
7312
HEIGHT
5285
12-Aug-2023
22:44



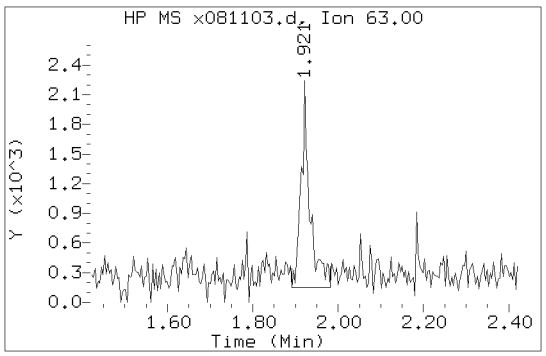
AFTER
MASS
61
AREA
7312
HEIGHT
5285
12-Aug-2023
22:44



BEFORE
MASS
63
AREA
3064
HEIGHT
2093
12-Aug-2023
22:44



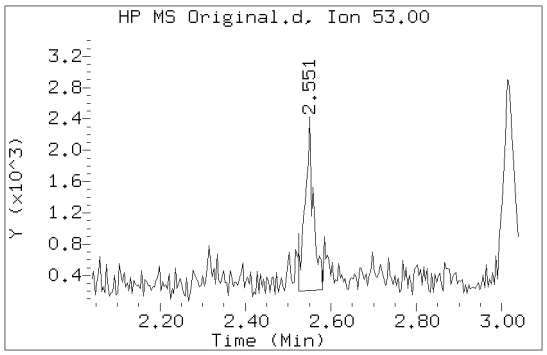
AFTER
MASS
63
AREA
3064
HEIGHT
2093
12-Aug-2023
22:44



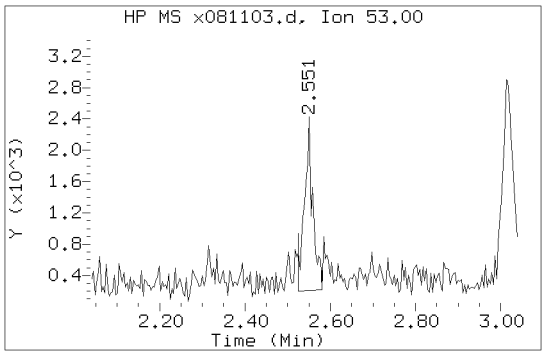
Acrylonitrile (107-13-1)

Reason Code:

BEFORE
MASS
53
AREA
3027
HEIGHT
2218
12-Aug-2023
22:44



AFTER
MASS
53
AREA
3027
HEIGHT
2218
12-Aug-2023
22:44

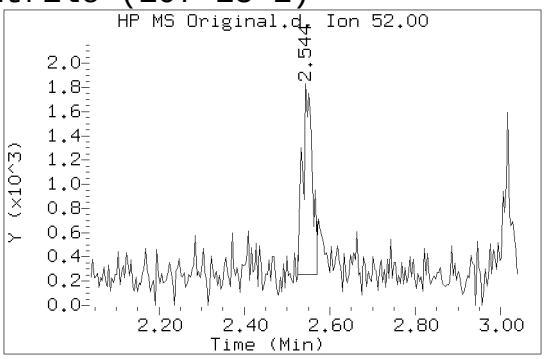


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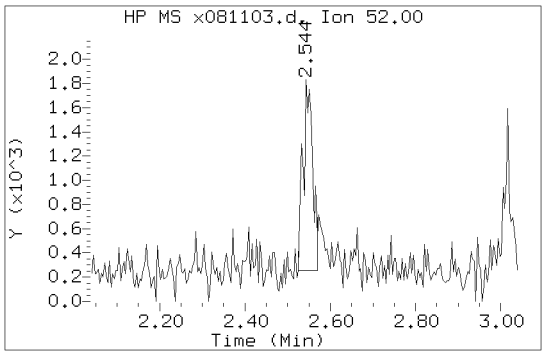
Acrylonitrile (107-13-1)

Reason Code:

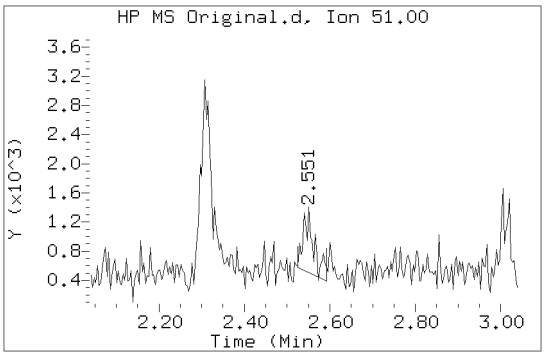
BEFORE
MASS
52
AREA
2521
HEIGHT
1577
12-Aug-2023
22:44



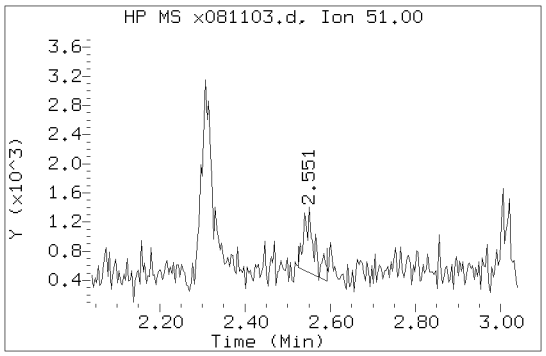
AFTER
MASS
52
AREA
2521
HEIGHT
1577
12-Aug-2023
22:44



BEFORE
MASS
51
AREA
1530
HEIGHT
904
12-Aug-2023
22:44



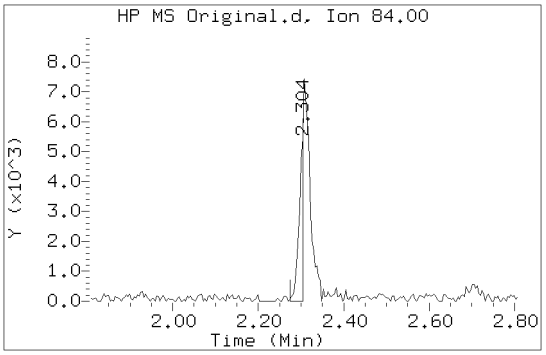
AFTER
MASS
51
AREA
1530
HEIGHT
904
12-Aug-2023
22:44



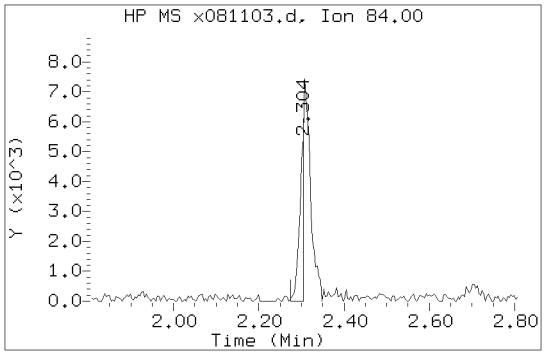
Methylene Chloride (75-09-2)

Reason Code:

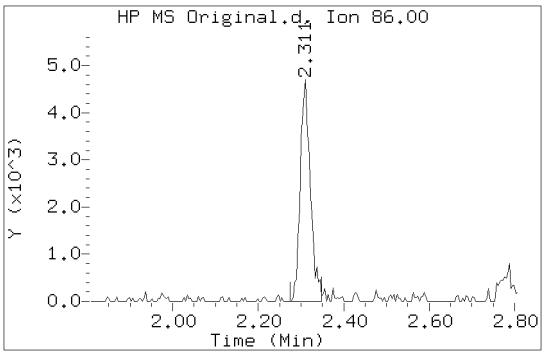
BEFORE
MASS
84
AREA
3889
HEIGHT
5468
12-Aug-2023
22:44



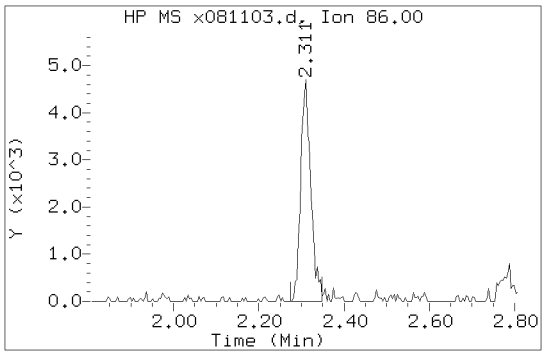
AFTER
MASS
84
AREA
3889
HEIGHT
5468
12-Aug-2023
22:44



BEFORE
MASS
86
AREA
7903
HEIGHT
4700
12-Aug-2023
22:44



AFTER
MASS
86
AREA
7903
HEIGHT
4700
12-Aug-2023
22:44

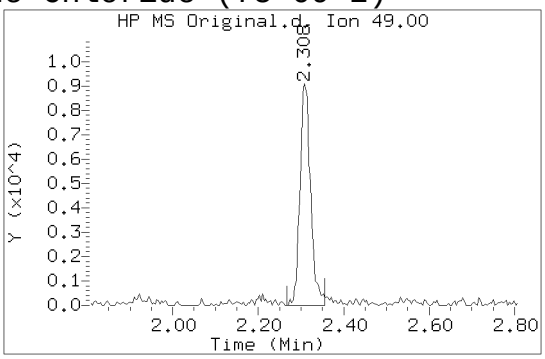


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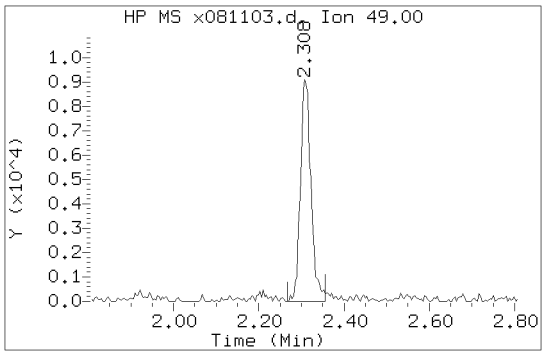
Methylene Chloride (75-09-2)

Reason Code:

BEFORE
MASS
49
AREA
16117
HEIGHT
9091
12-Aug-2023
22:44



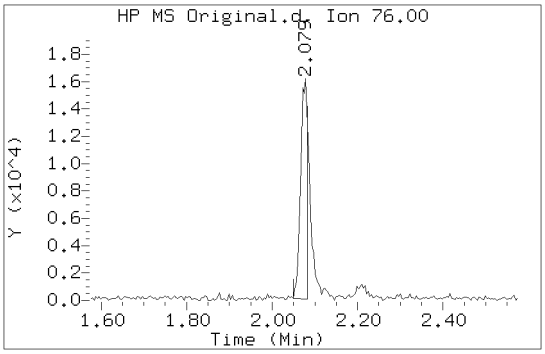
AFTER
MASS
49
AREA
16117
HEIGHT
9091
12-Aug-2023
22:44



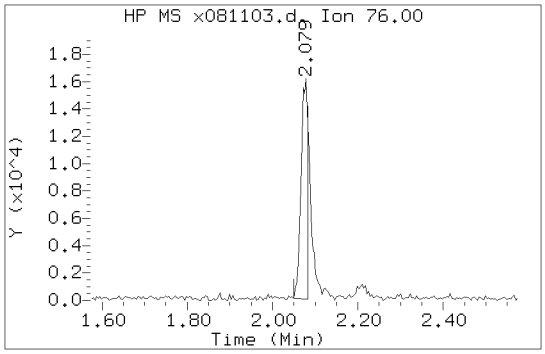
Carbon Disulfide (75-15-0)

Reason Code:

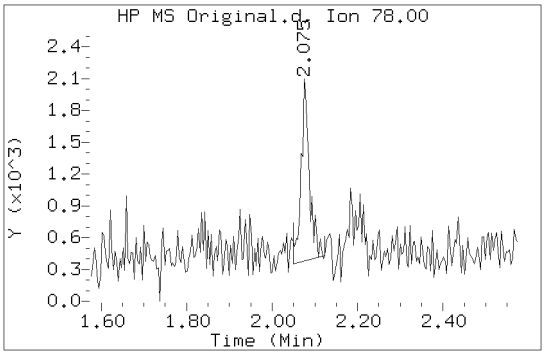
BEFORE
MASS
76
AREA
18059
HEIGHT
16106
12-Aug-2023
22:44



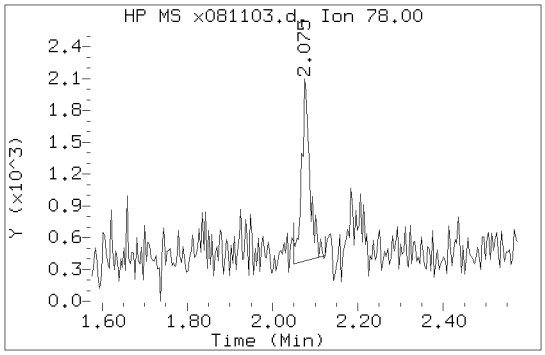
AFTER
MASS
76
AREA
18059
HEIGHT
16106
12-Aug-2023
22:44



BEFORE
MASS
78
AREA
2390
HEIGHT
1716
12-Aug-2023
22:44



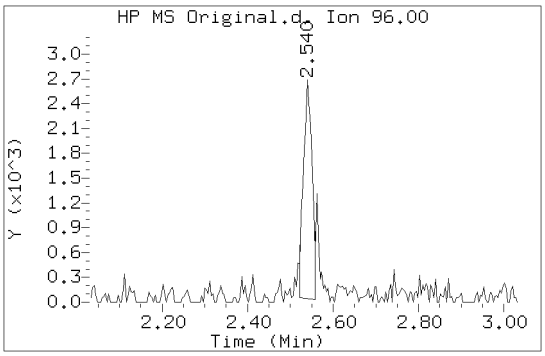
AFTER
MASS
78
AREA
2390
HEIGHT
1716
12-Aug-2023
22:44



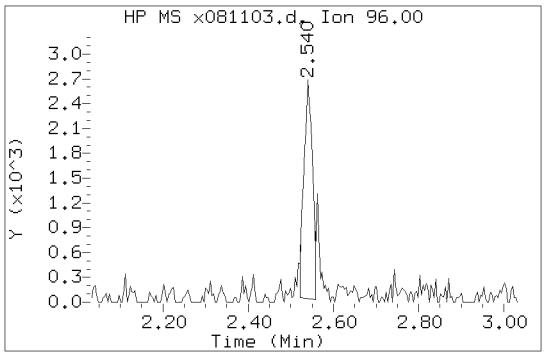
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
96
AREA
3848
HEIGHT
2643
12-Aug-2023
22:44



AFTER
MASS
96
AREA
3848
HEIGHT
2643
12-Aug-2023
22:44

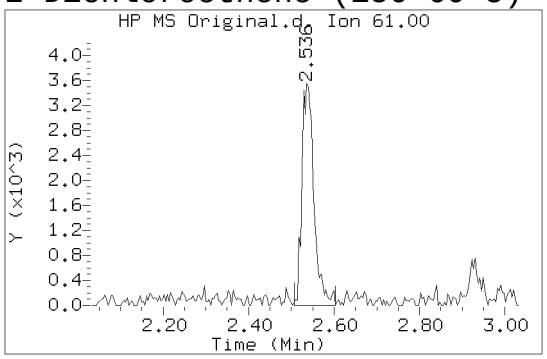


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InstruID : voa6.i
LabSampID : VSTD000.5

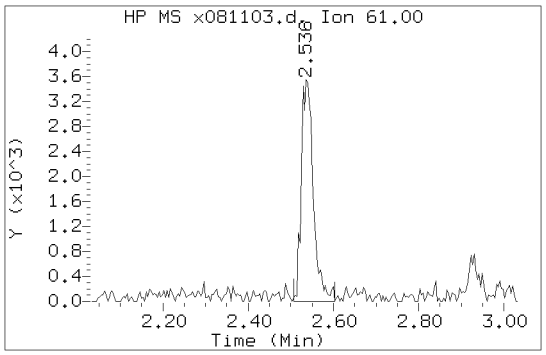
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

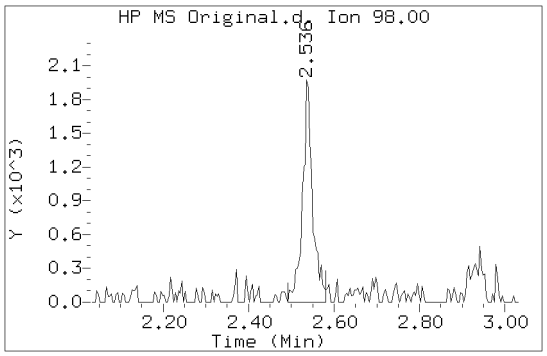
BEFORE
MASS
61
AREA
7075
HEIGHT
3548
12-Aug-2023
22:44



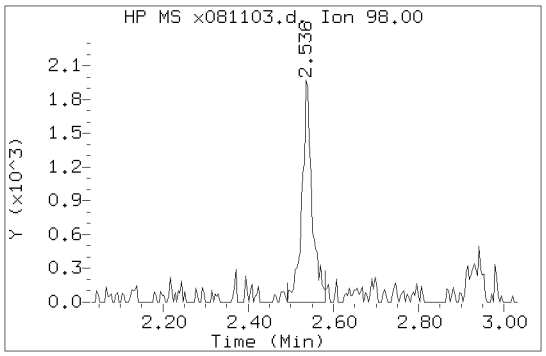
AFTER
MASS
61
AREA
7075
HEIGHT
3548
12-Aug-2023
22:44



BEFORE
MASS
98
AREA
3286
HEIGHT
1974
12-Aug-2023
22:44



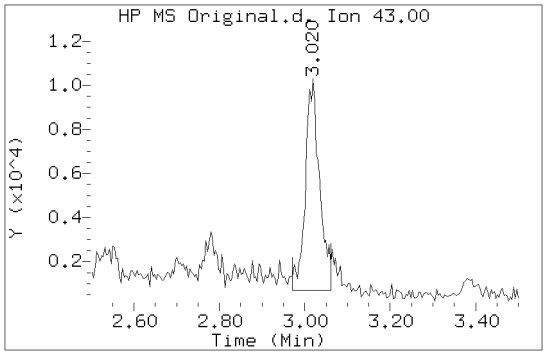
AFTER
MASS
98
AREA
3286
HEIGHT
1974
12-Aug-2023
22:44



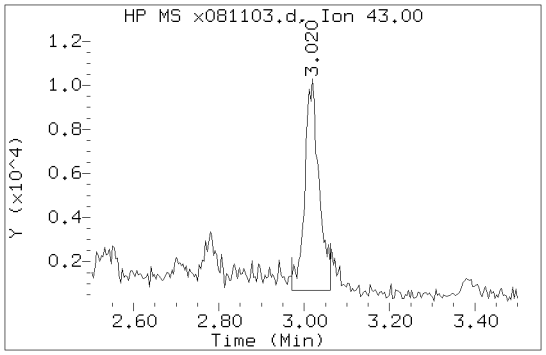
Vinyl Acetate (108-05-4)

Reason Code:

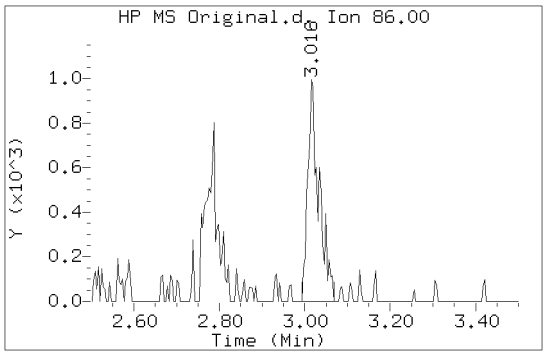
BEFORE
MASS
43
AREA
22253
HEIGHT
9580
12-Aug-2023
22:44



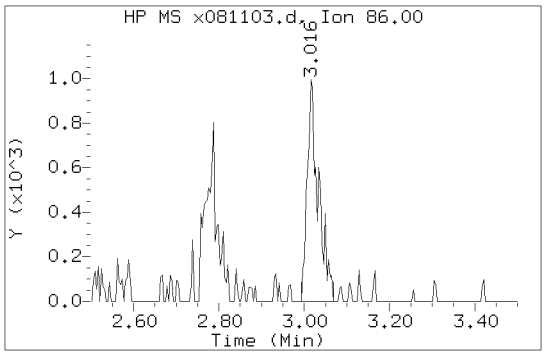
AFTER
MASS
43
AREA
22253
HEIGHT
9580
12-Aug-2023
22:44



BEFORE
MASS
86
AREA
1808
HEIGHT
995
12-Aug-2023
22:44



AFTER
MASS
86
AREA
1808
HEIGHT
995
12-Aug-2023
22:44

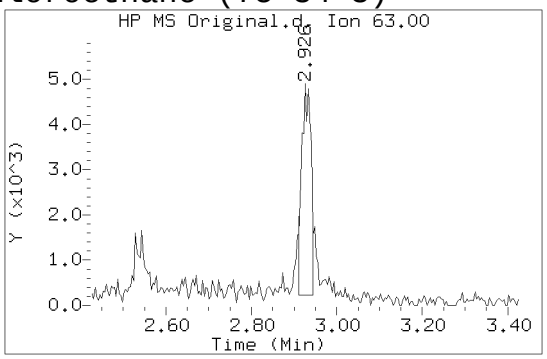


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

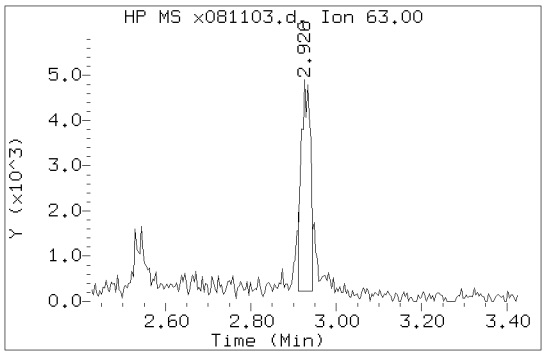
1,1-Dichloroethane (75-34-3)

Reason Code:

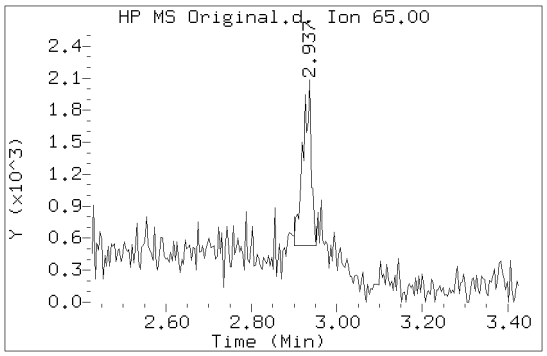
BEFORE
MASS
63
AREA
7346
HEIGHT
4676
12-Aug-2023
22:44



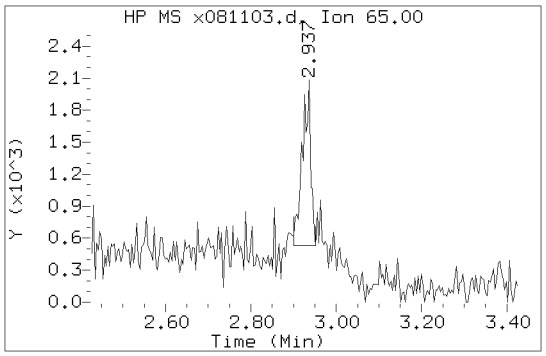
AFTER
MASS
63
AREA
7346
HEIGHT
4676
12-Aug-2023
22:44



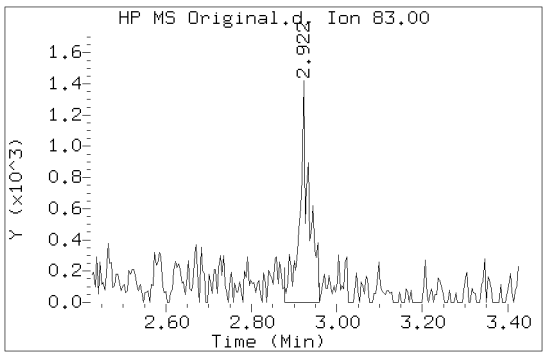
BEFORE
MASS
65
AREA
2162
HEIGHT
1553
12-Aug-2023
22:44



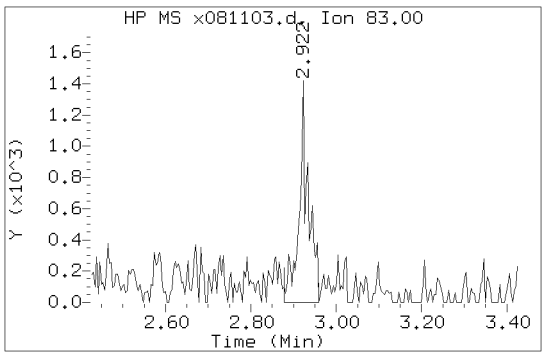
AFTER
MASS
65
AREA
2162
HEIGHT
1553
12-Aug-2023
22:44



BEFORE
MASS
83
AREA
2168
HEIGHT
1420
12-Aug-2023
22:44



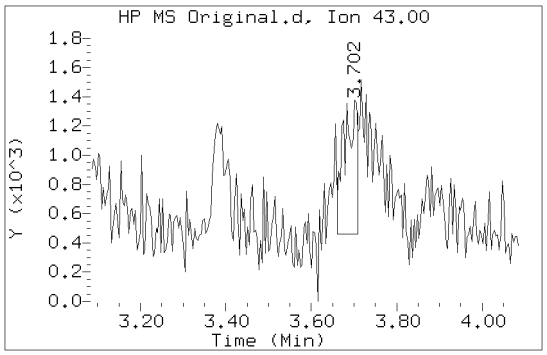
AFTER
MASS
83
AREA
2168
HEIGHT
1420
12-Aug-2023
22:44



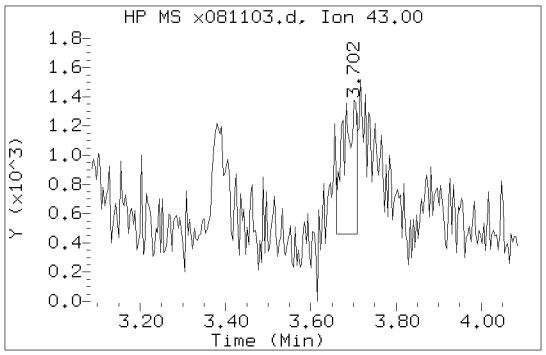
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
43
AREA
2017
HEIGHT
919
12-Aug-2023
22:44



AFTER
MASS
43
AREA
2017
HEIGHT
919
12-Aug-2023
22:44

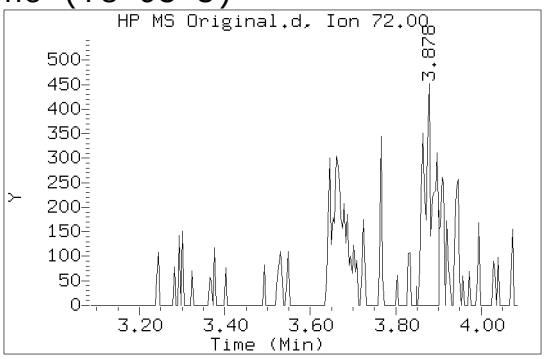


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

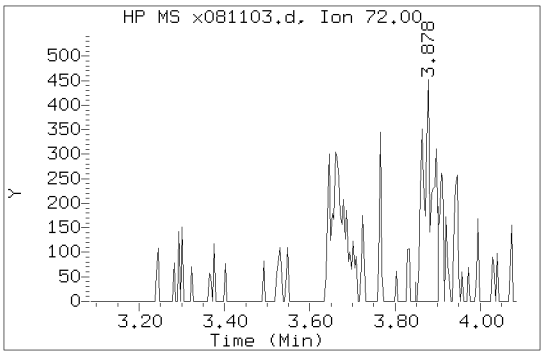
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
72
AREA
703
HEIGHT
452
12-Aug-2023
22:44



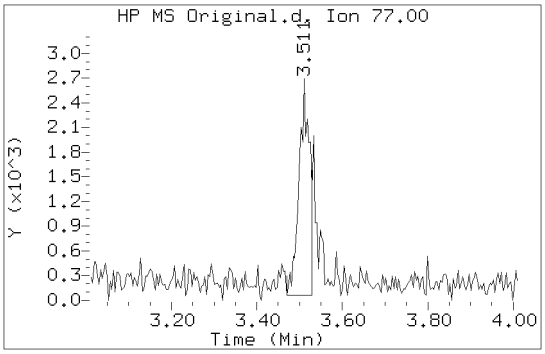
AFTER
MASS
72
AREA
703
HEIGHT
452
12-Aug-2023
22:44



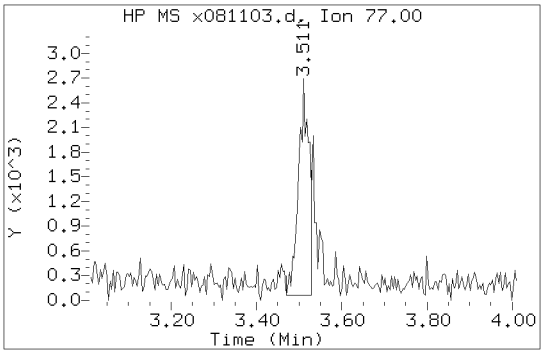
2,2-Dichloropropane (594-20-7)

Reason Code:

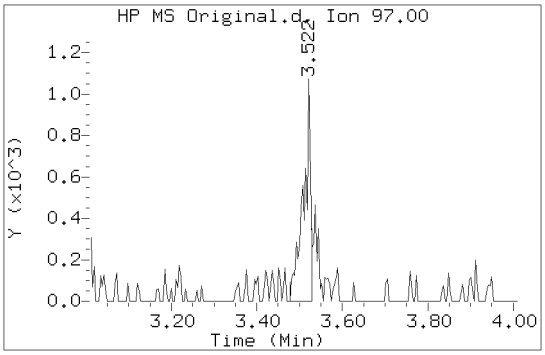
BEFORE
MASS
77
AREA
4612
HEIGHT
2627
12-Aug-2023
22:44



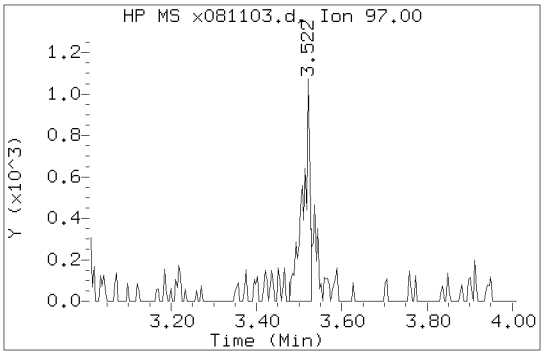
AFTER
MASS
77
AREA
4612
HEIGHT
2627
12-Aug-2023
22:44



BEFORE
MASS
97
AREA
1245
HEIGHT
1073
12-Aug-2023
22:44



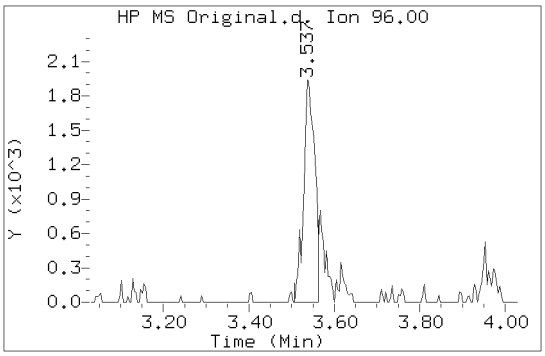
AFTER
MASS
97
AREA
1245
HEIGHT
1073
12-Aug-2023
22:44



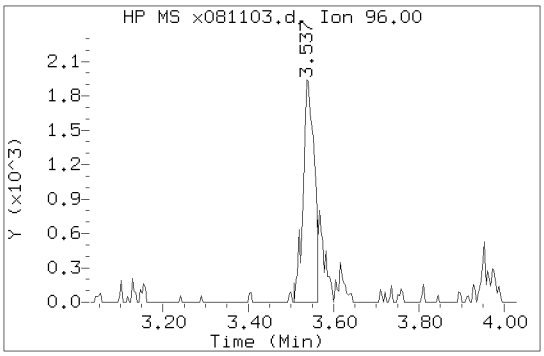
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

BEFORE
MASS
96
AREA
3574
HEIGHT
1940
12-Aug-2023
22:44



AFTER
MASS
96
AREA
3574
HEIGHT
1940
12-Aug-2023
22:44

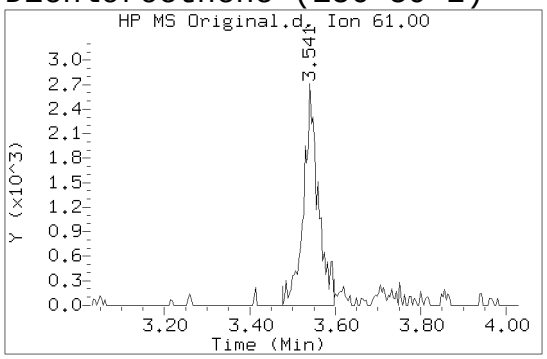


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

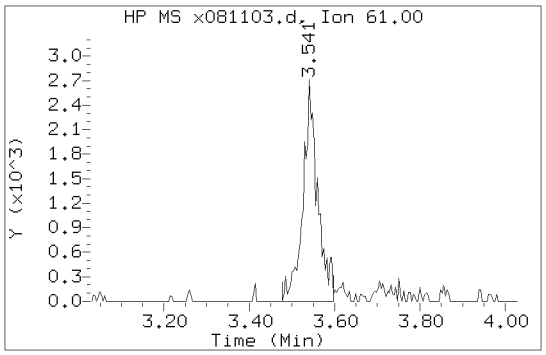
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

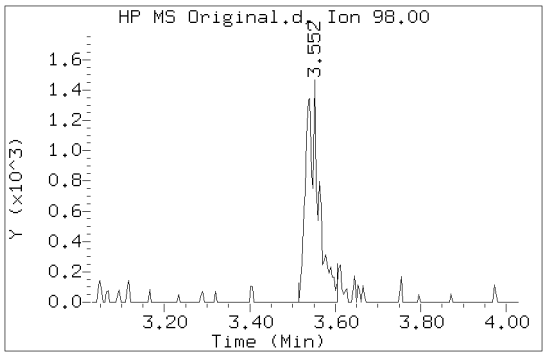
BEFORE
MASS
61
AREA
6484
HEIGHT
2712
12-Aug-2023
22:44



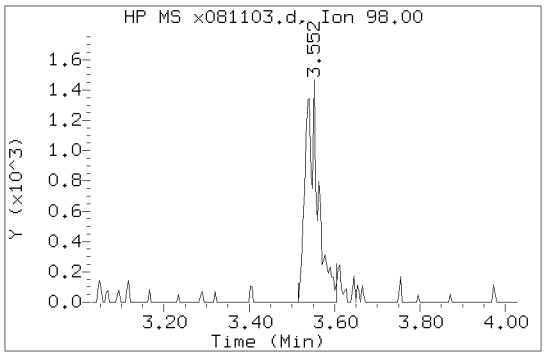
AFTER
MASS
61
AREA
6484
HEIGHT
2712
12-Aug-2023
22:44



BEFORE
MASS
98
AREA
3005
HEIGHT
1467
12-Aug-2023
22:44



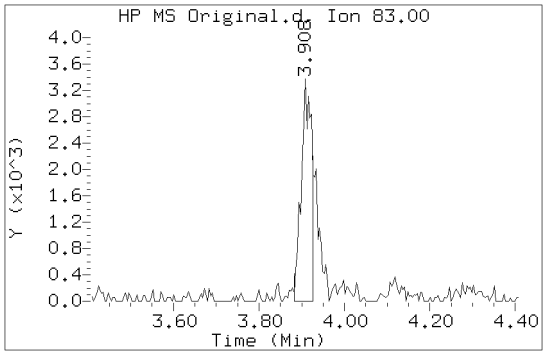
AFTER
MASS
98
AREA
3005
HEIGHT
1467
12-Aug-2023
22:44



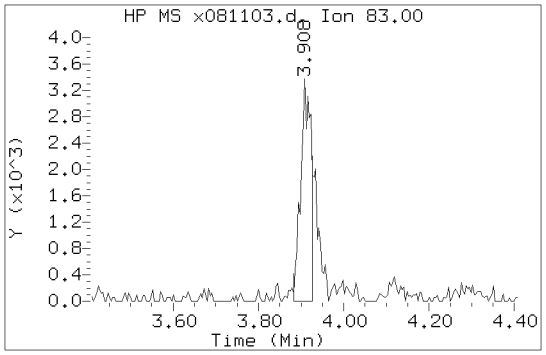
Chloroform (67-66-3)

Reason Code:

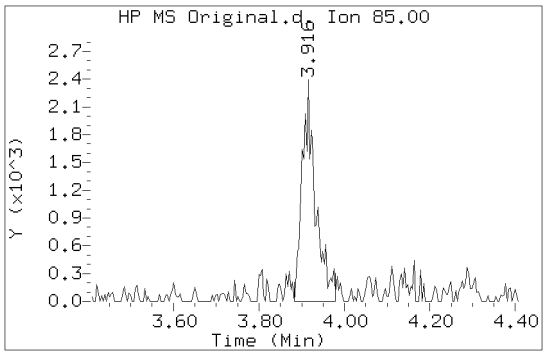
BEFORE
MASS
83
AREA
5756
HEIGHT
3376
12-Aug-2023
22:44



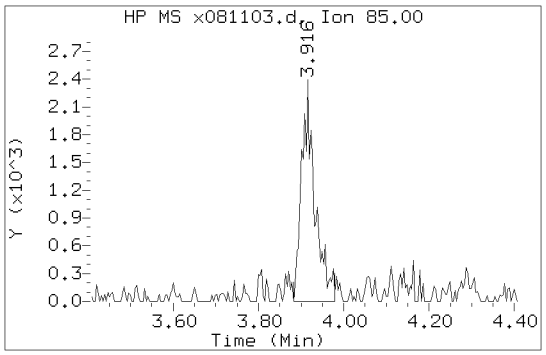
AFTER
MASS
83
AREA
5756
HEIGHT
3376
12-Aug-2023
22:44



BEFORE
MASS
85
AREA
5228
HEIGHT
2394
12-Aug-2023
22:44



AFTER
MASS
85
AREA
5228
HEIGHT
2394
12-Aug-2023
22:44

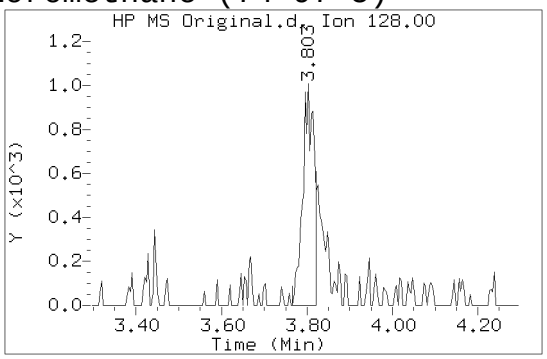


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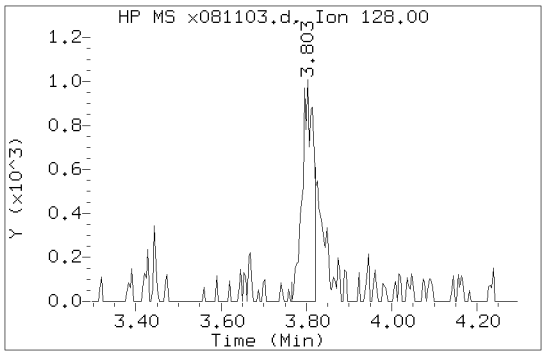
Bromochloromethane (74-97-5)

Reason Code:

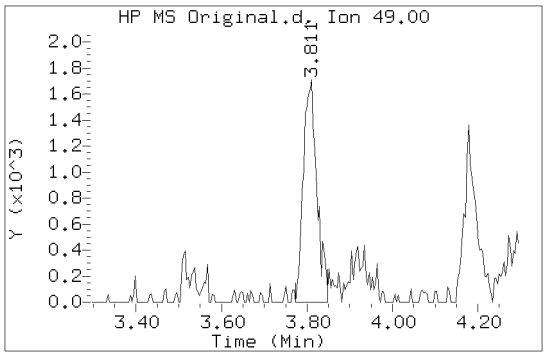
BEFORE
MASS
128
AREA
1872
HEIGHT
1008
12-Aug-2023
22:44



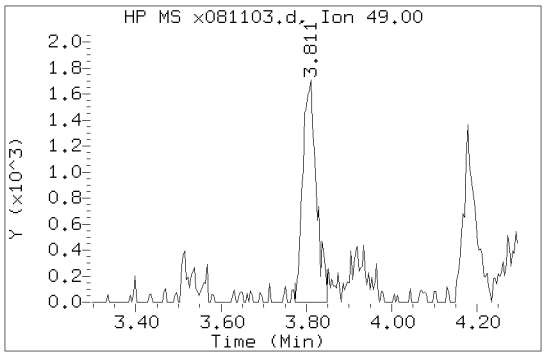
AFTER
MASS
128
AREA
1872
HEIGHT
1008
12-Aug-2023
22:44



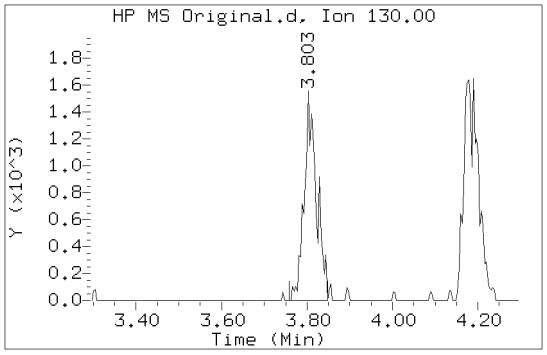
BEFORE
MASS
49
AREA
3815
HEIGHT
1708
12-Aug-2023
22:44



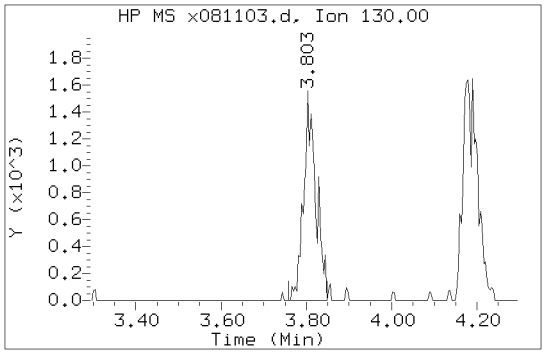
AFTER
MASS
49
AREA
3815
HEIGHT
1708
12-Aug-2023
22:44



BEFORE
MASS
130
AREA
3129
HEIGHT
1557
12-Aug-2023
22:44



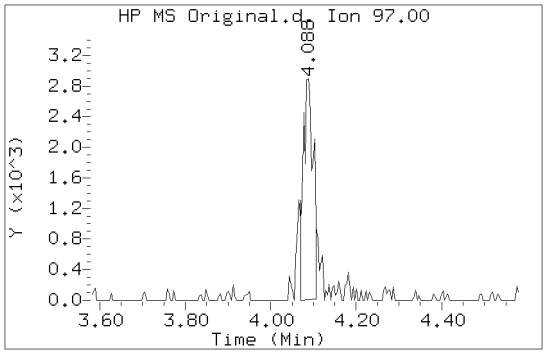
AFTER
MASS
130
AREA
3129
HEIGHT
1557
12-Aug-2023
22:44



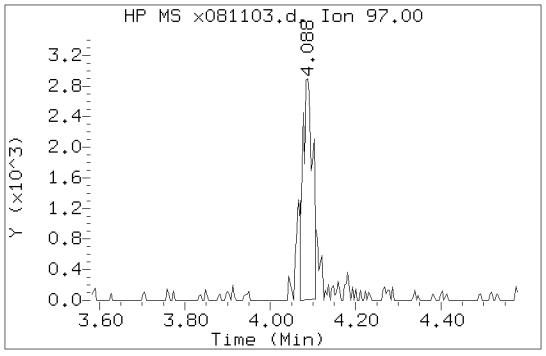
1,1,1-Trichloroethane (71-55-6)

Reason Code:

BEFORE
MASS
97
AREA
4852
HEIGHT
2888
12-Aug-2023
22:44



AFTER
MASS
97
AREA
4852
HEIGHT
2888
12-Aug-2023
22:44

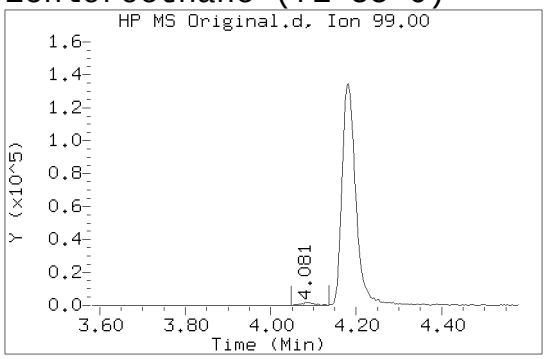


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InstruID : voa6.i
LabSampID : VSTD000.5

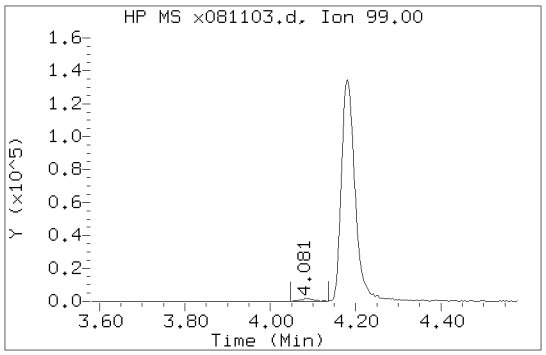
1,1,1-Trichloroethane (71-55-6)

Reason Code:

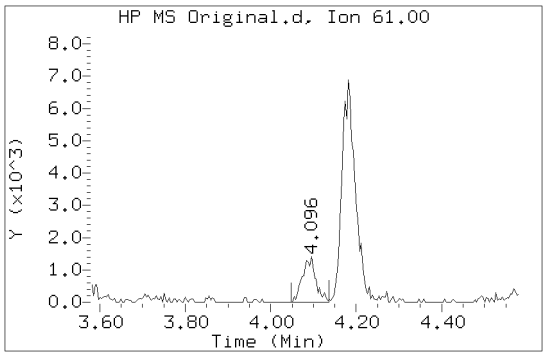
BEFORE
MASS
99
AREA
3886
HEIGHT
1872
12-Aug-2023
22:44



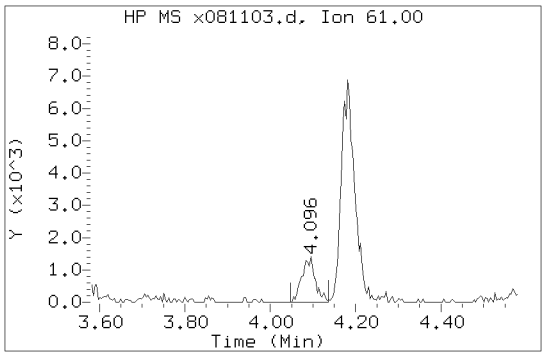
AFTER
MASS
99
AREA
3886
HEIGHT
1872
12-Aug-2023
22:44



BEFORE
MASS
61
AREA
3094
HEIGHT
1406
12-Aug-2023
22:44



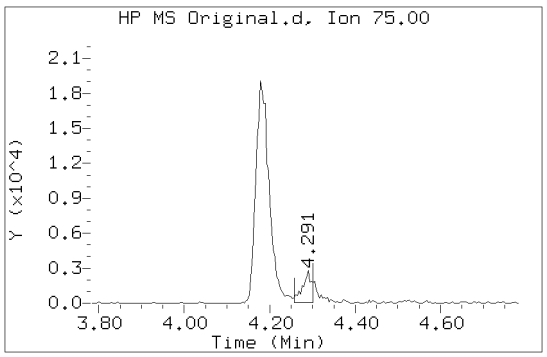
AFTER
MASS
61
AREA
3094
HEIGHT
1406
12-Aug-2023
22:44



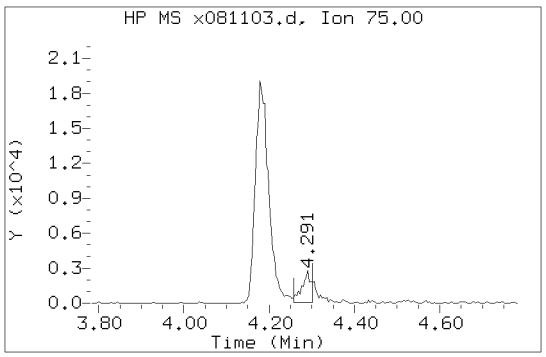
1,1-Dichloropropene (563-58-6)

Reason Code:

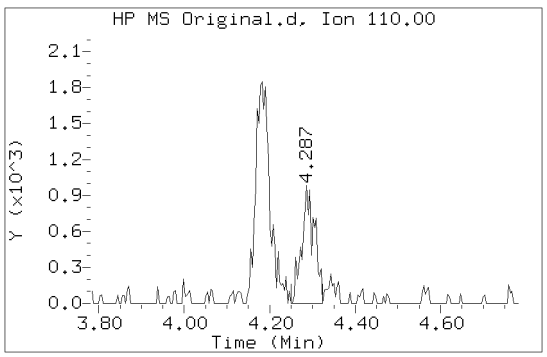
BEFORE
MASS
75
AREA
4132
HEIGHT
2765
12-Aug-2023
22:44



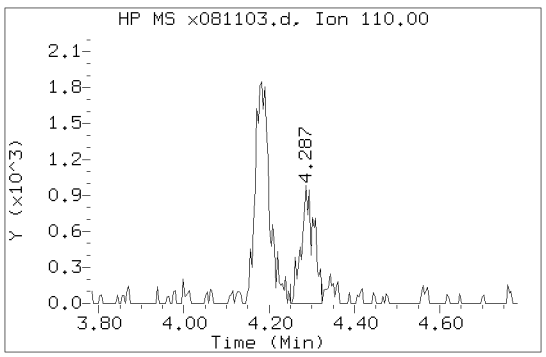
AFTER
MASS
75
AREA
4132
HEIGHT
2765
12-Aug-2023
22:44



BEFORE
MASS
110
AREA
2063
HEIGHT
982
12-Aug-2023
22:44



AFTER
MASS
110
AREA
2063
HEIGHT
982
12-Aug-2023
22:44



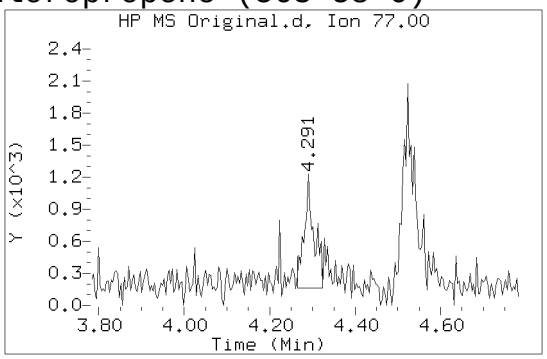
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloropropene (563-58-6)

Reason Code:

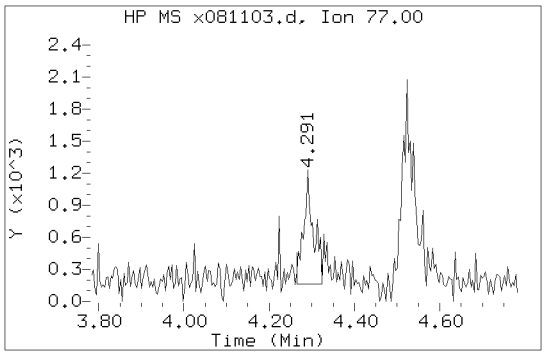
BEFORE

MASS
77
AREA
1739
HEIGHT
1070
12-Aug-2023
22:44



AFTER

MASS
77
AREA
1739
HEIGHT
1070
12-Aug-2023
22:44

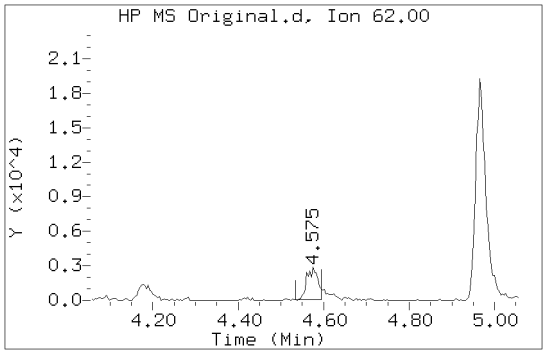


1,2-Dichloroethane (107-06-2)

Reason Code:

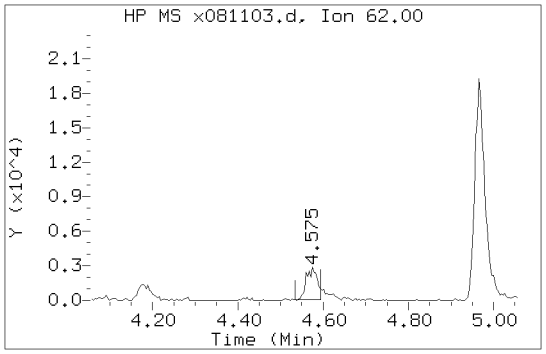
BEFORE

MASS
62
AREA
4942
HEIGHT
2820
12-Aug-2023
22:44



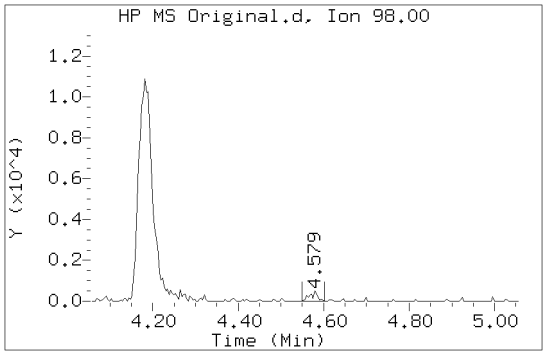
AFTER

MASS
62
AREA
4942
HEIGHT
2820
12-Aug-2023
22:44



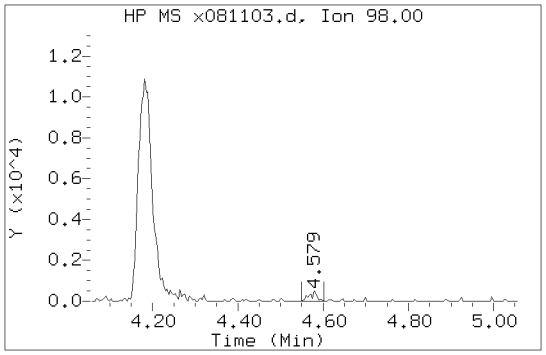
BEFORE

MASS
98
AREA
620
HEIGHT
519
12-Aug-2023
22:44



AFTER

MASS
98
AREA
620
HEIGHT
519
12-Aug-2023
22:44

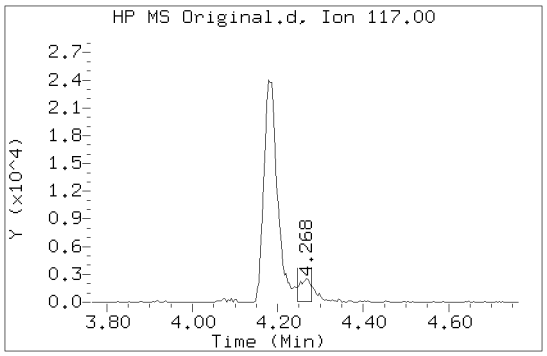


Carbon Tetrachloride (56-23-5)

Reason Code:

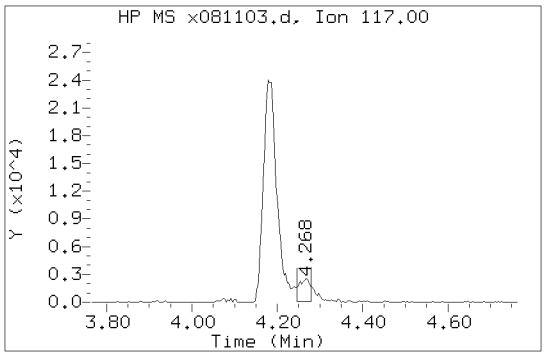
BEFORE

MASS
117
AREA
4492
HEIGHT
2452
12-Aug-2023
22:44



AFTER

MASS
117
AREA
4492
HEIGHT
2452
12-Aug-2023
22:44

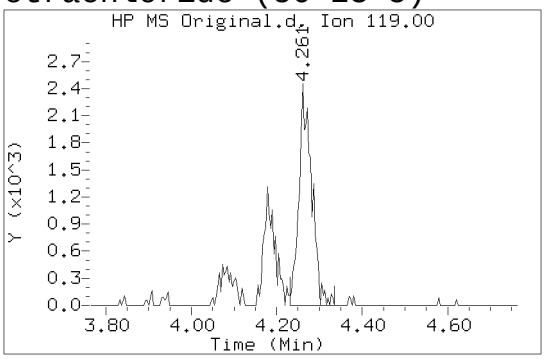


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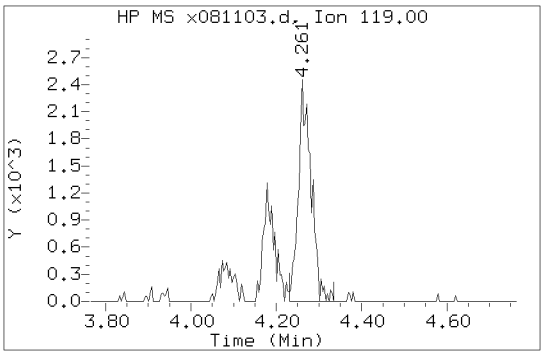
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
119
AREA
5136
HEIGHT
2455
12-Aug-2023
22:44



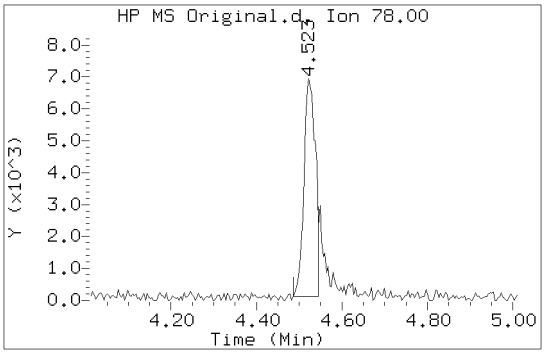
AFTER
MASS
119
AREA
5136
HEIGHT
2455
12-Aug-2023
22:44



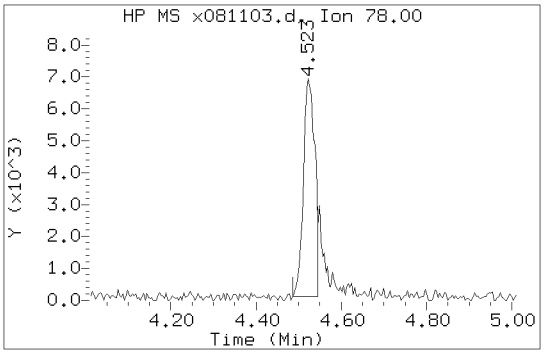
Benzene (71-43-2)

Reason Code:

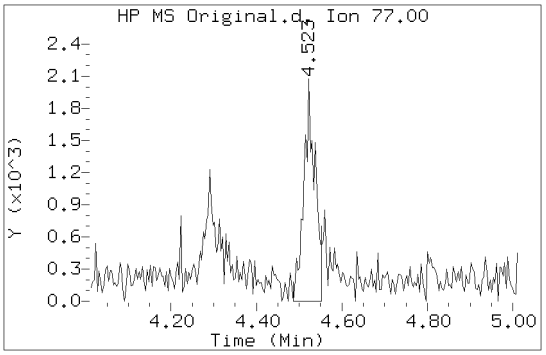
BEFORE
MASS
78
AREA
12962
HEIGHT
6832
12-Aug-2023
22:44



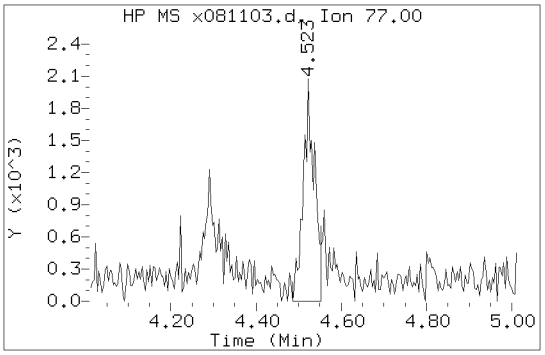
AFTER
MASS
78
AREA
12962
HEIGHT
6832
12-Aug-2023
22:44



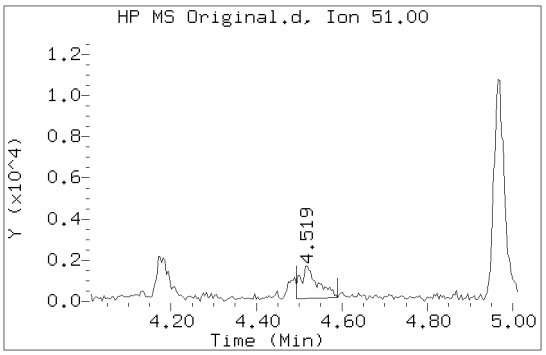
BEFORE
MASS
77
AREA
3841
HEIGHT
2074
12-Aug-2023
22:44



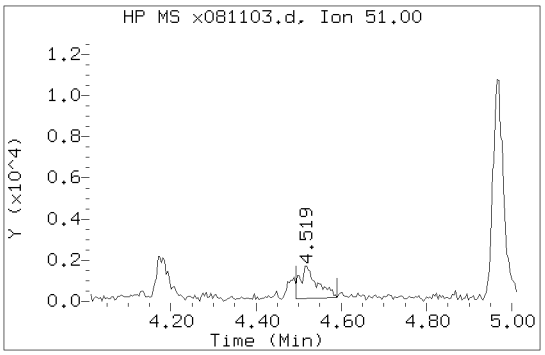
AFTER
MASS
77
AREA
3841
HEIGHT
2074
12-Aug-2023
22:44



BEFORE
MASS
51
AREA
4527
HEIGHT
1570
12-Aug-2023
22:44



AFTER
MASS
51
AREA
4527
HEIGHT
1570
12-Aug-2023
22:44

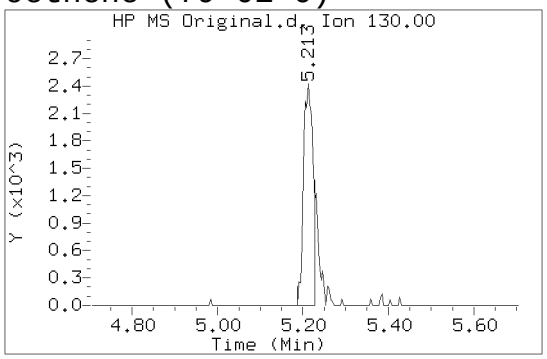


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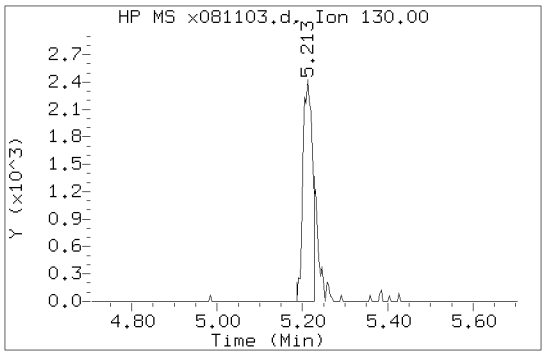
Trichloroethene (79-01-6)

Reason Code:

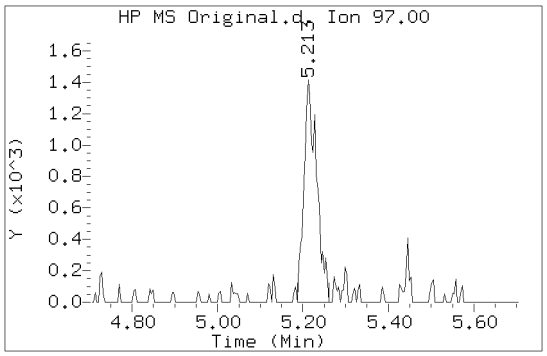
BEFORE
MASS
130
AREA
3802
HEIGHT
2426
12-Aug-2023
22:44



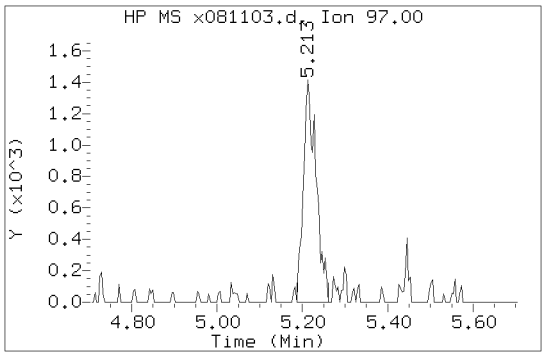
AFTER
MASS
130
AREA
3802
HEIGHT
2426
12-Aug-2023
22:44



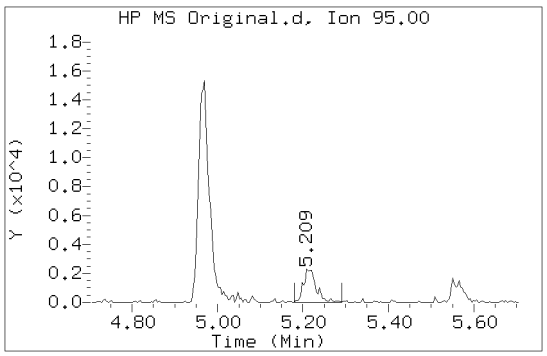
BEFORE
MASS
97
AREA
2959
HEIGHT
1415
12-Aug-2023
22:44



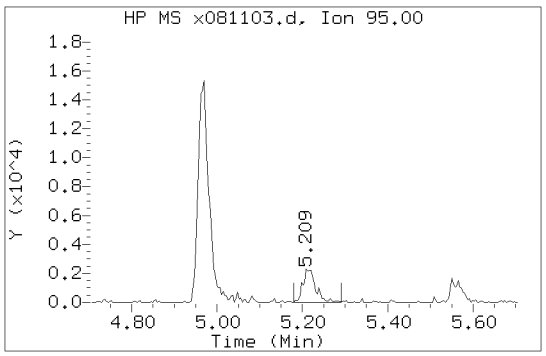
AFTER
MASS
97
AREA
2959
HEIGHT
1415
12-Aug-2023
22:44



BEFORE
MASS
95
AREA
4810
HEIGHT
2295
12-Aug-2023
22:44



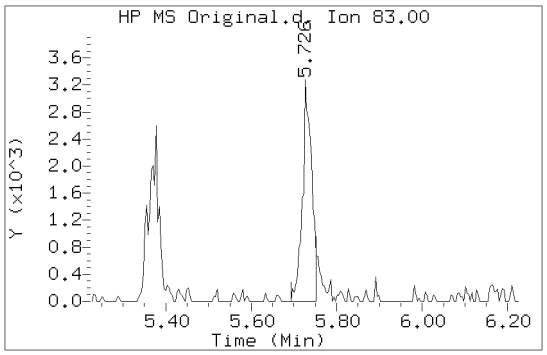
AFTER
MASS
95
AREA
4810
HEIGHT
2295
12-Aug-2023
22:44



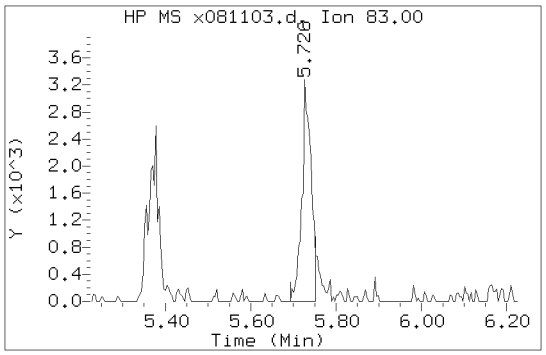
Bromodichloromethane (75-27-4)

Reason Code:

BEFORE
MASS
83
AREA
5036
HEIGHT
3277
12-Aug-2023
22:44



AFTER
MASS
83
AREA
5036
HEIGHT
3277
12-Aug-2023
22:44

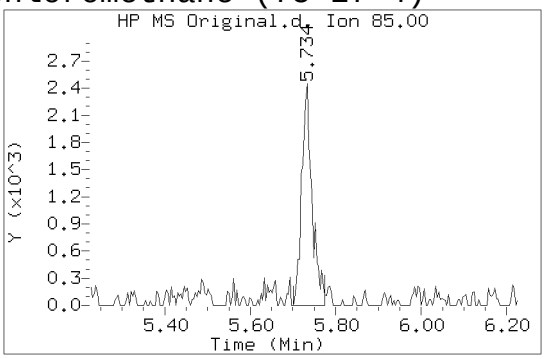


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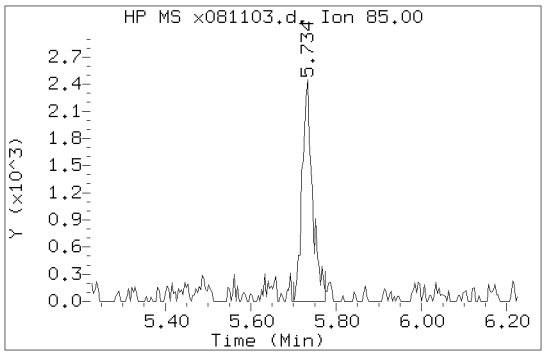
Bromodichloromethane (75-27-4)

Reason Code:

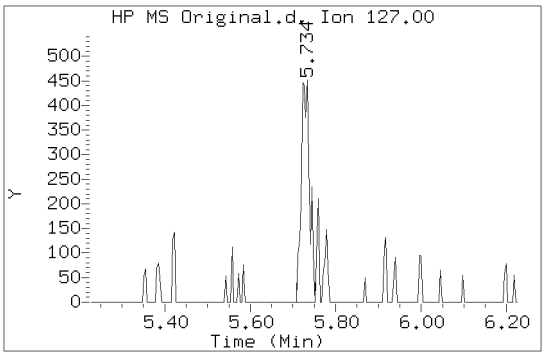
BEFORE
MASS
85
AREA
4196
HEIGHT
2450
12-Aug-2023
22:44



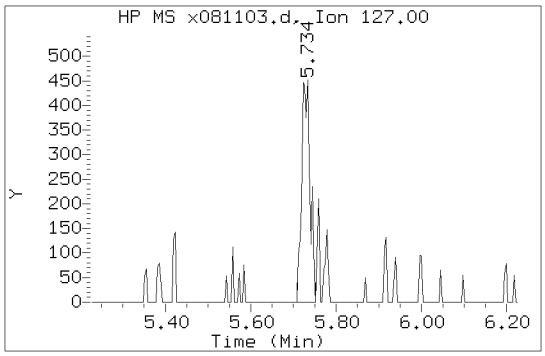
AFTER
MASS
85
AREA
4196
HEIGHT
2450
12-Aug-2023
22:44



BEFORE
MASS
127
AREA
636
HEIGHT
452
12-Aug-2023
22:44



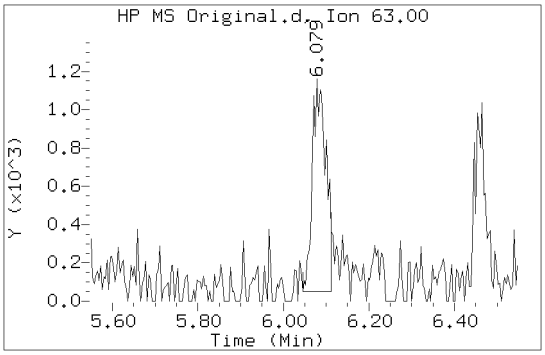
AFTER
MASS
127
AREA
636
HEIGHT
452
12-Aug-2023
22:44



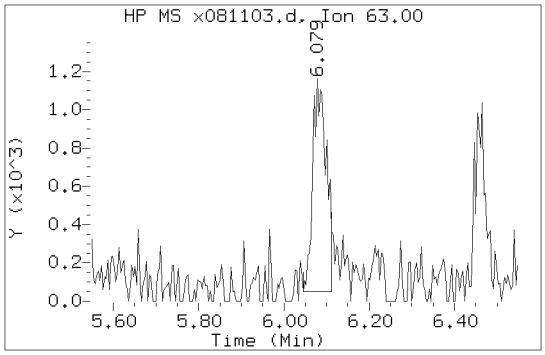
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

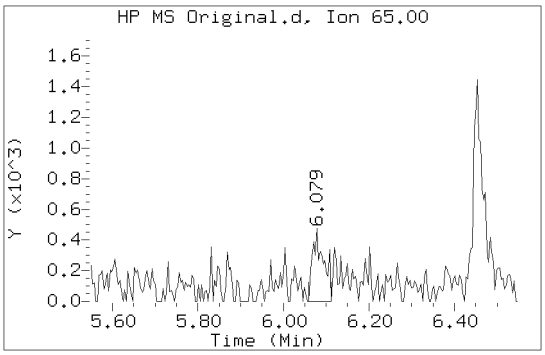
BEFORE
MASS
63
AREA
2443
HEIGHT
1109
12-Aug-2023
22:44



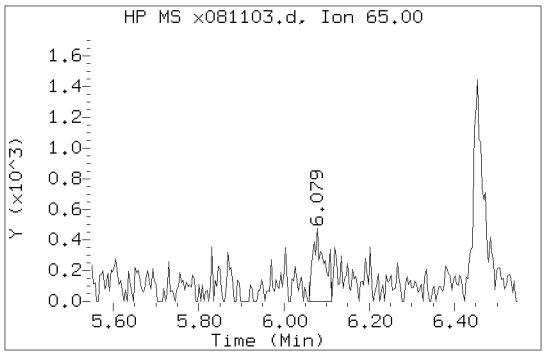
AFTER
MASS
63
AREA
2443
HEIGHT
1109
12-Aug-2023
22:44



BEFORE
MASS
65
AREA
845
HEIGHT
477
12-Aug-2023
22:44



AFTER
MASS
65
AREA
845
HEIGHT
477
12-Aug-2023
22:44

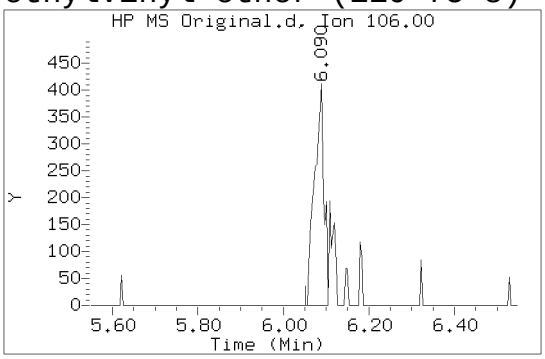


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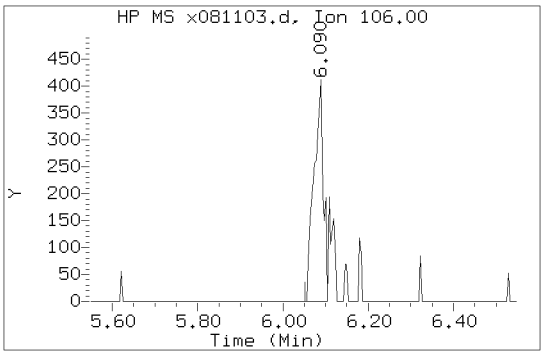
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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MASS
106
AREA
627
HEIGHT
412
12-Aug-2023
22:44



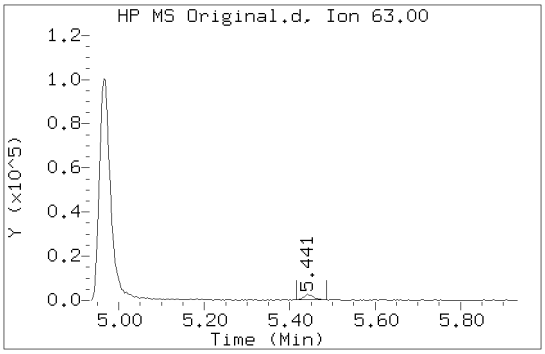
AFTER
MASS
106
AREA
627
HEIGHT
412
12-Aug-2023
22:44



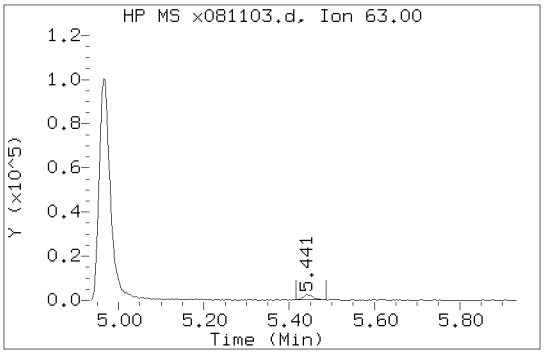
1,2-Dichloropropane (78-87-5)

Reason Code:

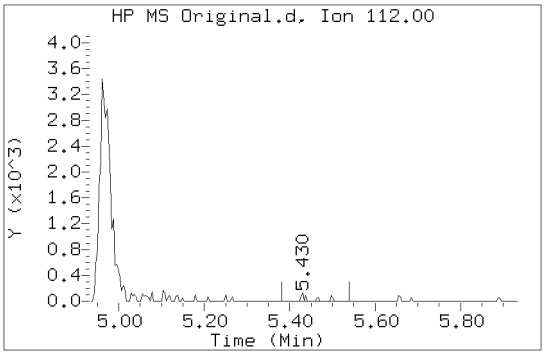
BEFORE
MASS
63
AREA
3864
HEIGHT
2635
12-Aug-2023
22:44



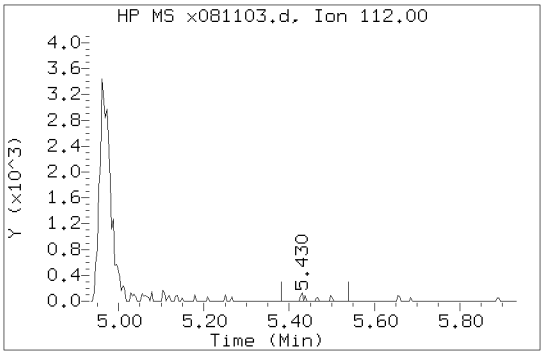
AFTER
MASS
63
AREA
3864
HEIGHT
2635
12-Aug-2023
22:44



BEFORE
MASS
112
AREA
124
HEIGHT
134
12-Aug-2023
22:44



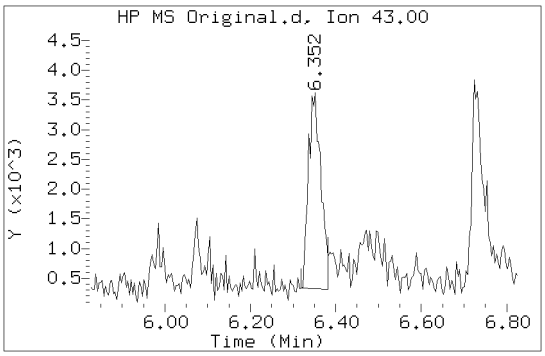
AFTER
MASS
112
AREA
124
HEIGHT
134
12-Aug-2023
22:44



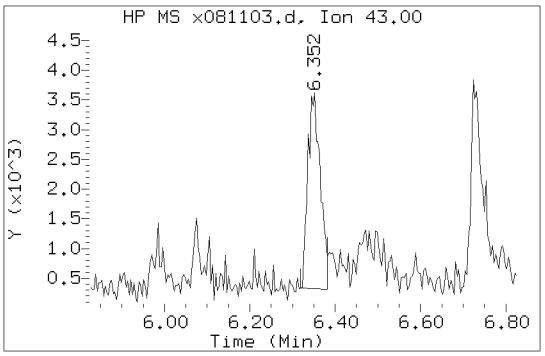
4-Methyl-2-Pentanone (108-10-1)

Reason Code:

BEFORE
MASS
43
AREA
6765
HEIGHT
3307
12-Aug-2023
22:44



AFTER
MASS
43
AREA
6765
HEIGHT
3307
12-Aug-2023
22:44

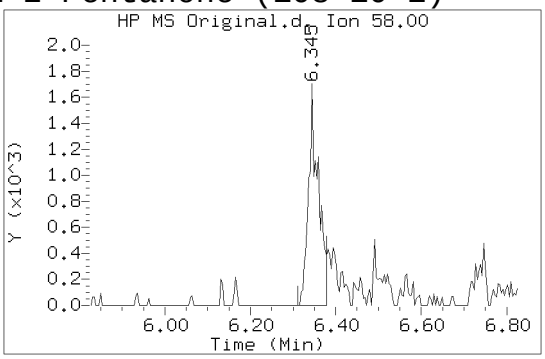


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InstruID : voa6.i
LabSampID : VSTD000.5

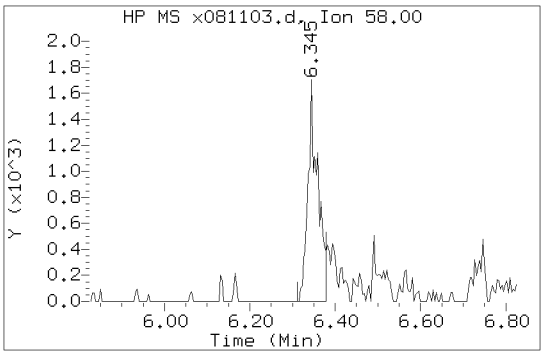
4-Methyl-2-Pentanone (108-10-1)

Reason Code:

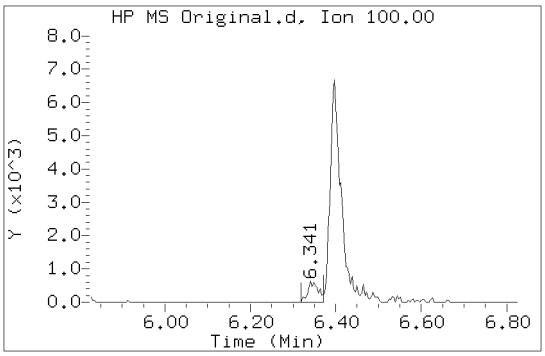
BEFORE
MASS
58
AREA
2754
HEIGHT
1705
12-Aug-2023
22:44



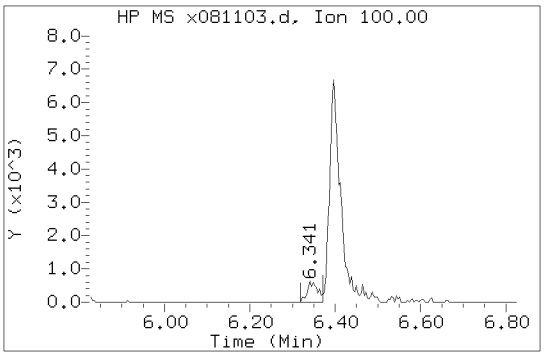
AFTER
MASS
58
AREA
2754
HEIGHT
1705
12-Aug-2023
22:44



BEFORE
MASS
100
AREA
1094
HEIGHT
644
12-Aug-2023
22:44



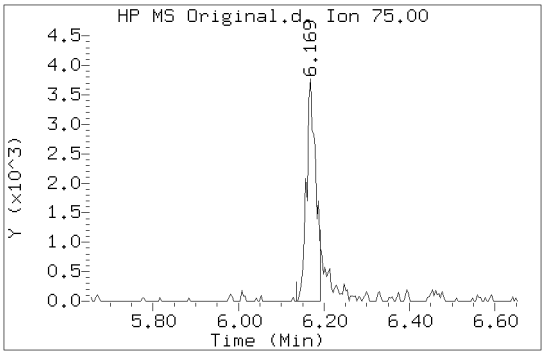
AFTER
MASS
100
AREA
1094
HEIGHT
644
12-Aug-2023
22:44



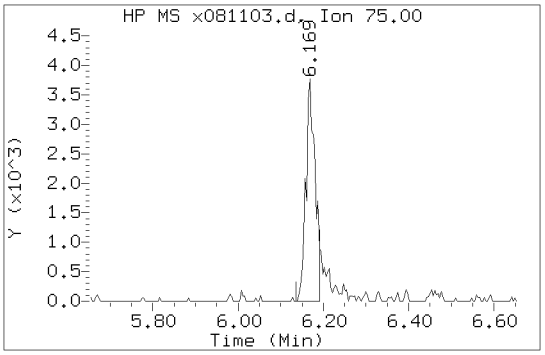
cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

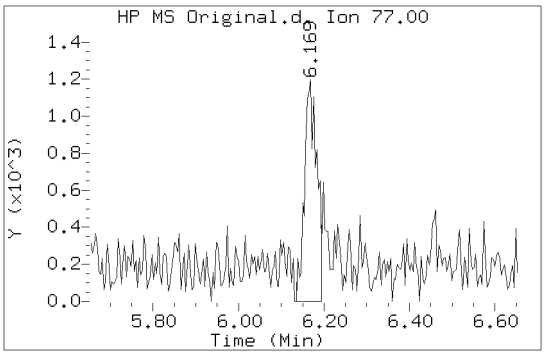
BEFORE
MASS
75
AREA
5702
HEIGHT
3770
12-Aug-2023
22:44



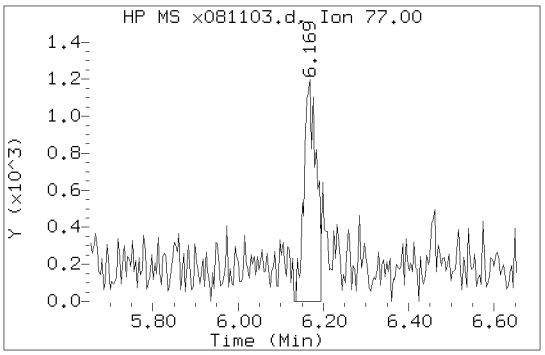
AFTER
MASS
75
AREA
5702
HEIGHT
3770
12-Aug-2023
22:44



BEFORE
MASS
77
AREA
2427
HEIGHT
1197
12-Aug-2023
22:44



AFTER
MASS
77
AREA
2427
HEIGHT
1197
12-Aug-2023
22:44

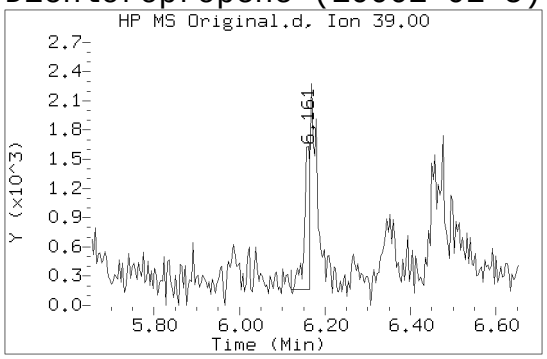


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InstruID : voa6.i
LabSampID : VSTD000.5

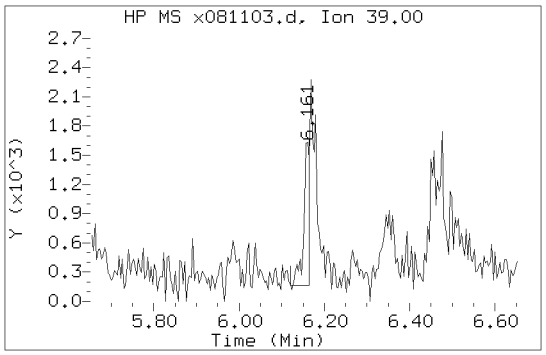
cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

BEFORE
MASS
39
AREA
1423
HEIGHT
1463
12-Aug-2023
22:44



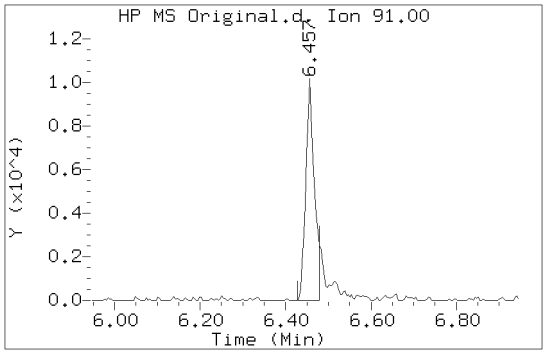
AFTER
MASS
39
AREA
1423
HEIGHT
1463
12-Aug-2023
22:44



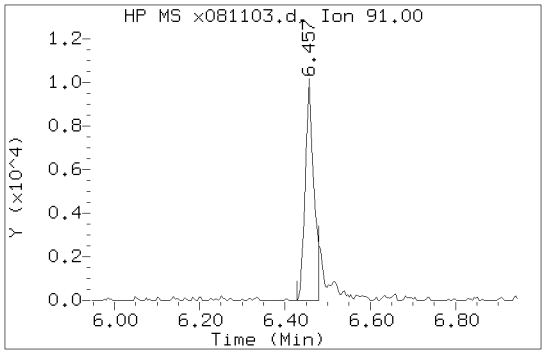
Toluene (108-88-3)

Reason Code:

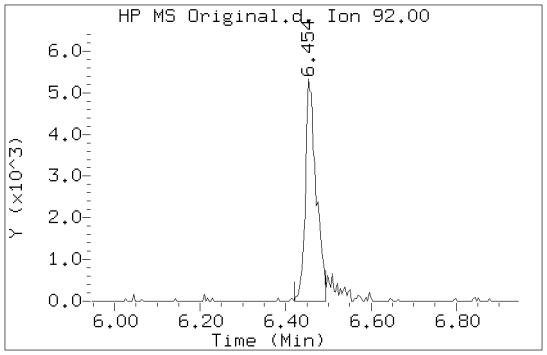
BEFORE
MASS
91
AREA
14402
HEIGHT
10180
12-Aug-2023
22:44



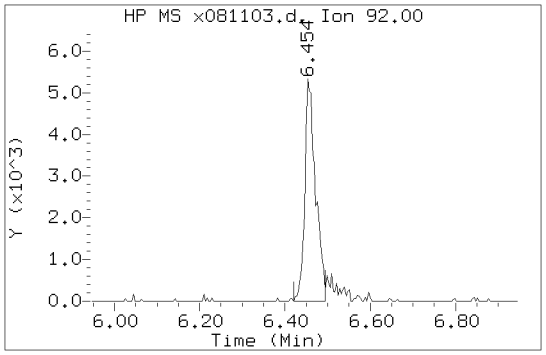
AFTER
MASS
91
AREA
14402
HEIGHT
10180
12-Aug-2023
22:44



BEFORE
MASS
92
AREA
9443
HEIGHT
5333
12-Aug-2023
22:44



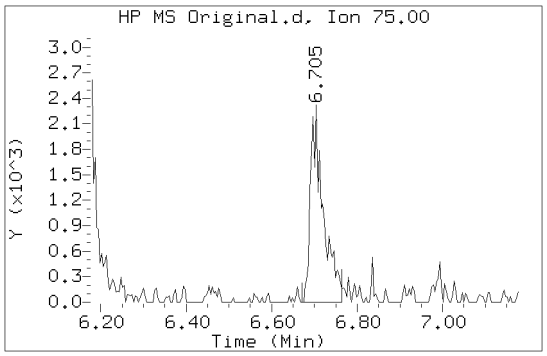
AFTER
MASS
92
AREA
9443
HEIGHT
5333
12-Aug-2023
22:44



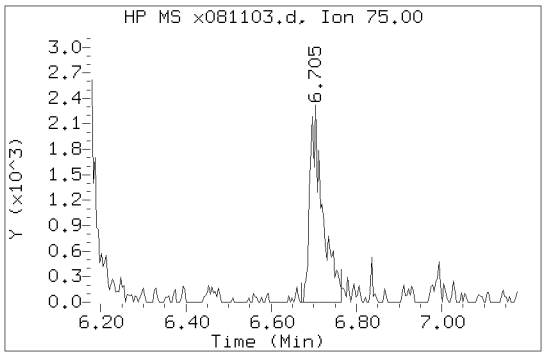
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
75
AREA
4833
HEIGHT
2322
12-Aug-2023
22:44



AFTER
MASS
75
AREA
4833
HEIGHT
2322
12-Aug-2023
22:44

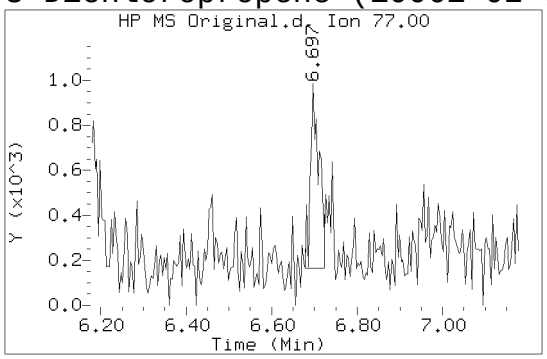


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InstruID : voa6.i
LabSampID : VSTD000.5

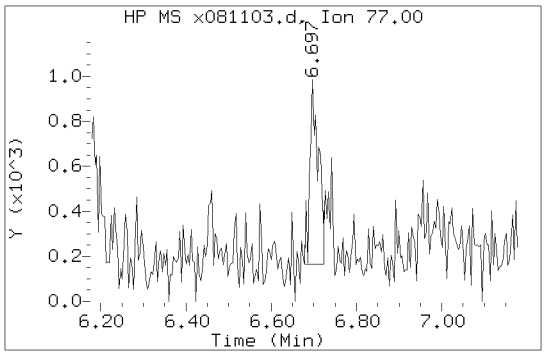
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

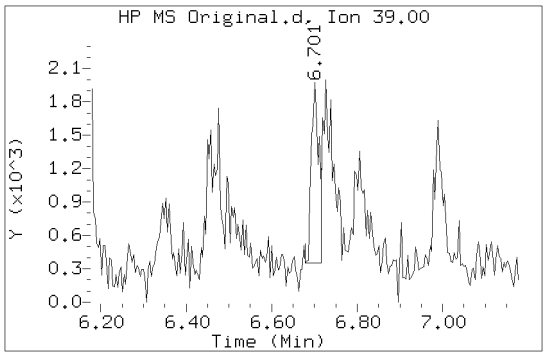
BEFORE
MASS
77
AREA
1159
HEIGHT
821
12-Aug-2023
22:44



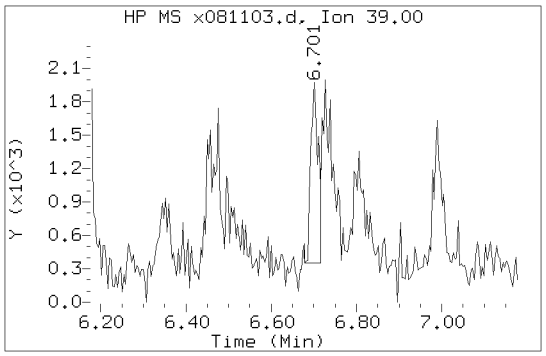
AFTER
MASS
77
AREA
1159
HEIGHT
821
12-Aug-2023
22:44



BEFORE
MASS
39
AREA
1956
HEIGHT
1620
12-Aug-2023
22:44



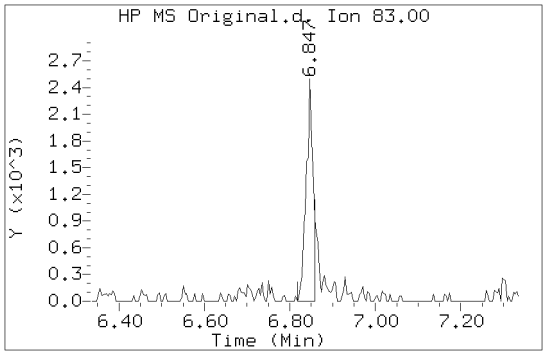
AFTER
MASS
39
AREA
1956
HEIGHT
1620
12-Aug-2023
22:44



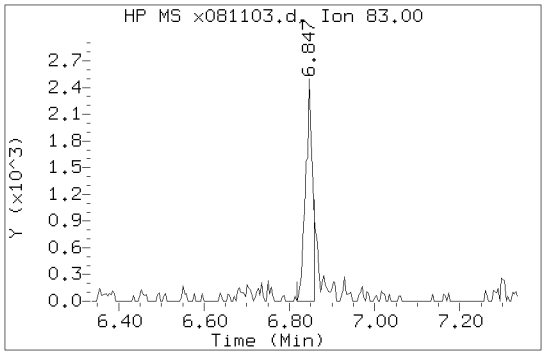
1,1,2-Trichloroethane (79-00-5)

Reason Code:

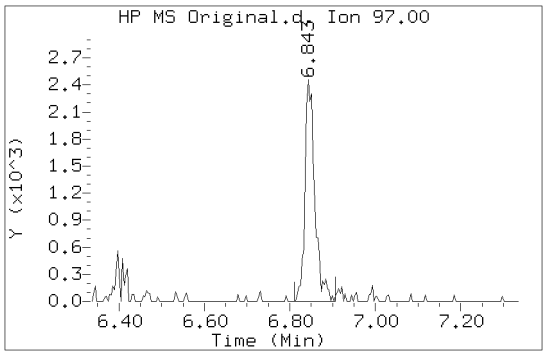
BEFORE
MASS
83
AREA
2765
HEIGHT
2497
12-Aug-2023
22:44



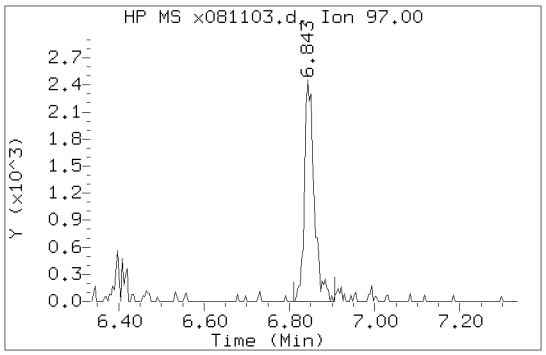
AFTER
MASS
83
AREA
2765
HEIGHT
2497
12-Aug-2023
22:44



BEFORE
MASS
97
AREA
4005
HEIGHT
2458
12-Aug-2023
22:44



AFTER
MASS
97
AREA
4005
HEIGHT
2458
12-Aug-2023
22:44

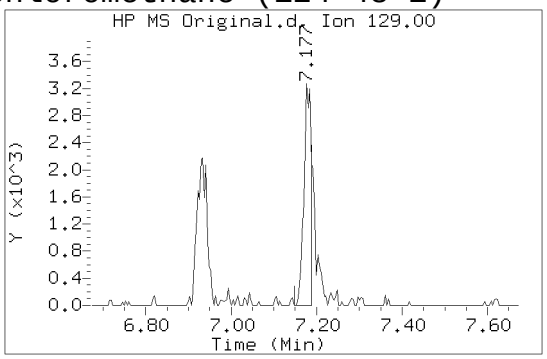


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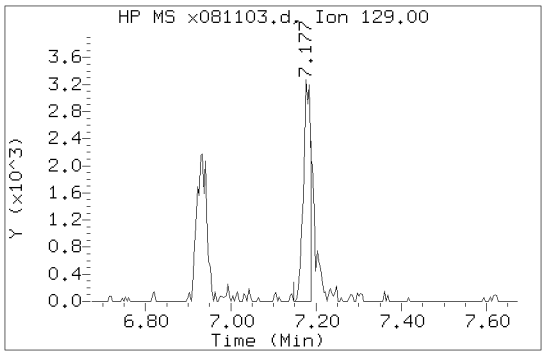
Dibromochloromethane (124-48-1)

Reason Code:

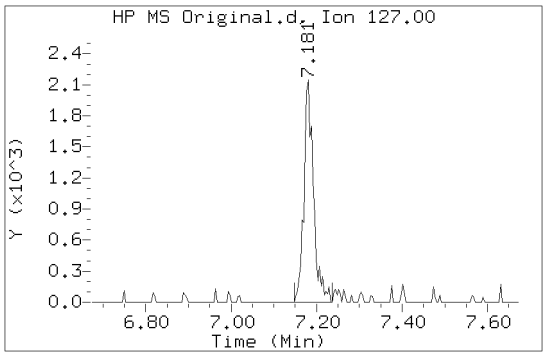
BEFORE
MASS
129
AREA
3861
HEIGHT
3271
12-Aug-2023
22:44



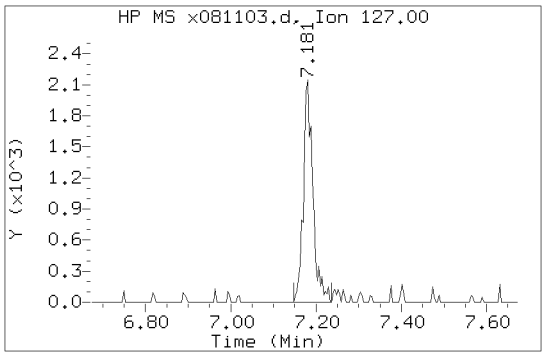
AFTER
MASS
129
AREA
3861
HEIGHT
3271
12-Aug-2023
22:44



BEFORE
MASS
127
AREA
3398
HEIGHT
2147
12-Aug-2023
22:44



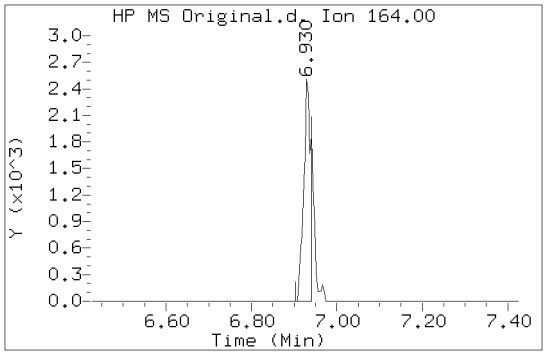
AFTER
MASS
127
AREA
3398
HEIGHT
2147
12-Aug-2023
22:44



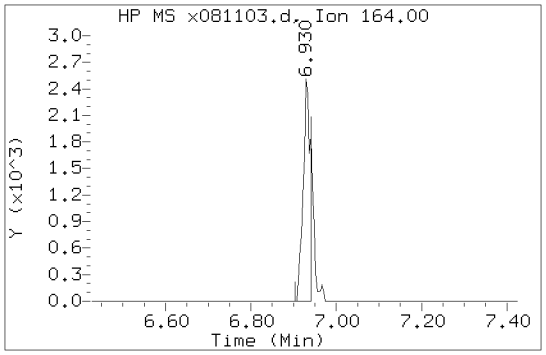
Tetrachloroethene (127-18-4)

Reason Code:

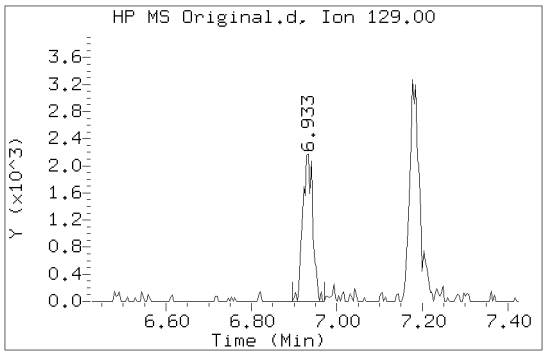
BEFORE
MASS
164
AREA
2916
HEIGHT
2512
12-Aug-2023
22:44



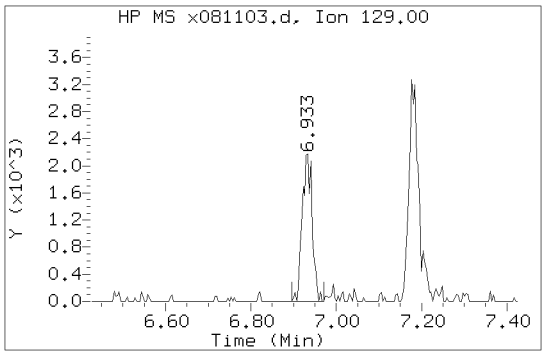
AFTER
MASS
164
AREA
2916
HEIGHT
2512
12-Aug-2023
22:44



BEFORE
MASS
129
AREA
3586
HEIGHT
2175
12-Aug-2023
22:44



AFTER
MASS
129
AREA
3586
HEIGHT
2175
12-Aug-2023
22:44



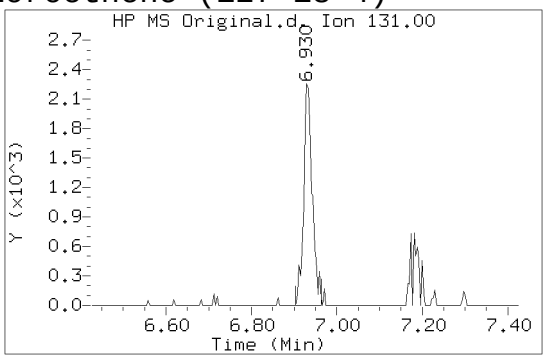
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LabSampID : VSTD000.5

Tetrachloroethene (127-18-4)

Reason Code:

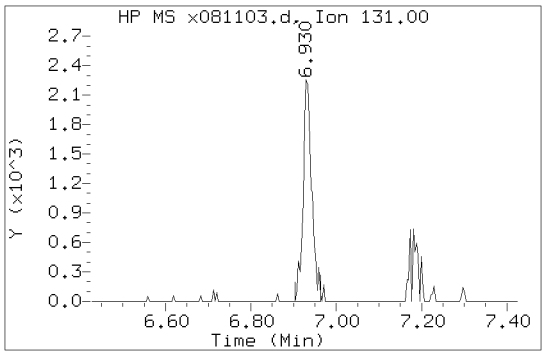
BEFORE

MASS
131
AREA
3239
HEIGHT
2257
12-Aug-2023
22:44



AFTER

MASS
131
AREA
3239
HEIGHT
2257
12-Aug-2023
22:44

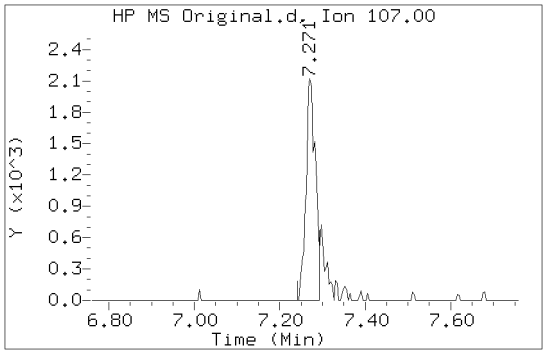


1,2-Dibromoethane (106-93-4)

Reason Code:

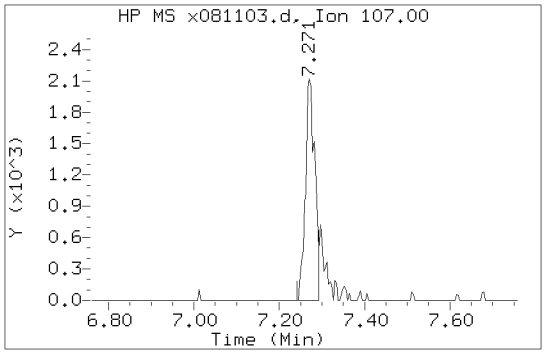
BEFORE

MASS
107
AREA
3314
HEIGHT
2121
12-Aug-2023
22:44



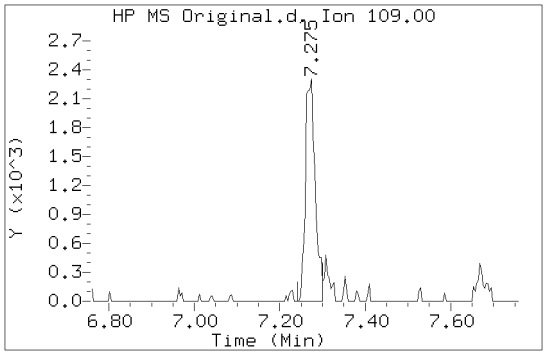
AFTER

MASS
107
AREA
3314
HEIGHT
2121
12-Aug-2023
22:44



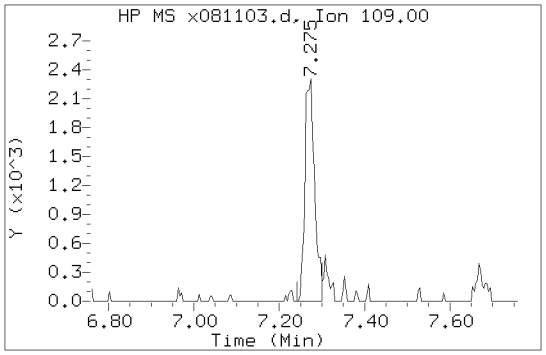
BEFORE

MASS
109
AREA
3693
HEIGHT
2305
12-Aug-2023
22:44



AFTER

MASS
109
AREA
3693
HEIGHT
2305
12-Aug-2023
22:44

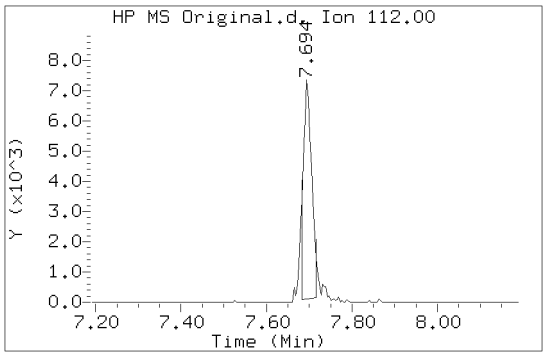


Chlorobenzene (108-90-7)

Reason Code:

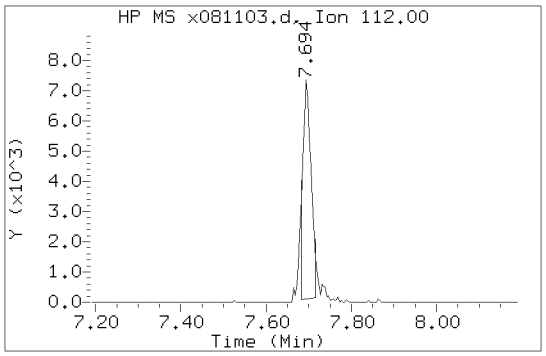
BEFORE

MASS
112
AREA
10027
HEIGHT
7254
12-Aug-2023
22:44



AFTER

MASS
112
AREA
10027
HEIGHT
7254
12-Aug-2023
22:44

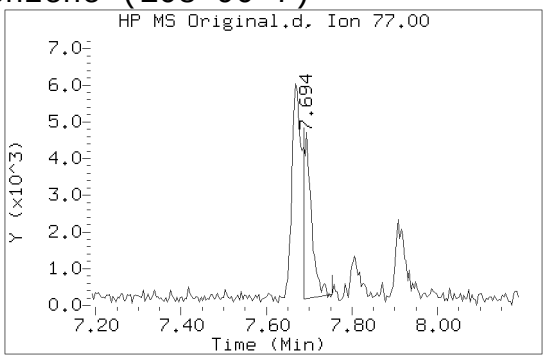


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

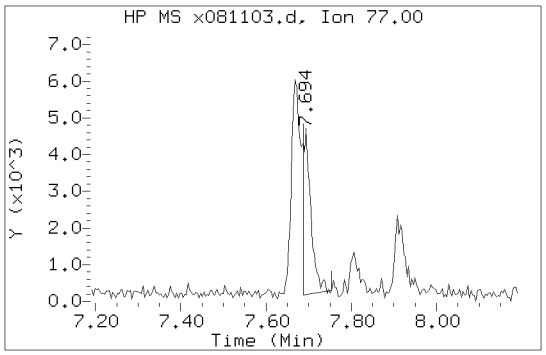
Chlorobenzene (108-90-7)

Reason Code:

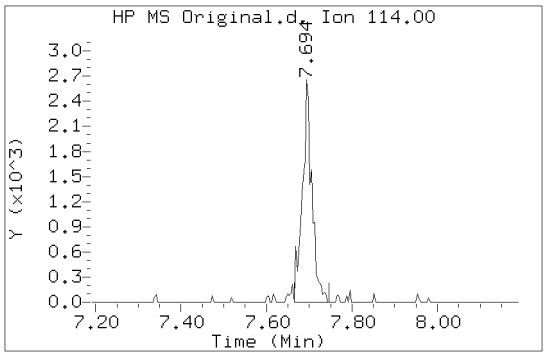
BEFORE
MASS
77
AREA
5875
HEIGHT
4525
12-Aug-2023
22:44



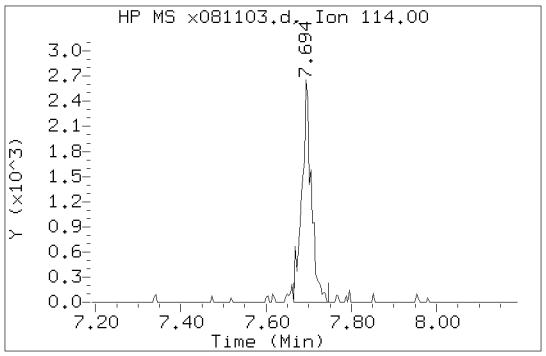
AFTER
MASS
77
AREA
5875
HEIGHT
4525
12-Aug-2023
22:44



BEFORE
MASS
114
AREA
4154
HEIGHT
2655
12-Aug-2023
22:44



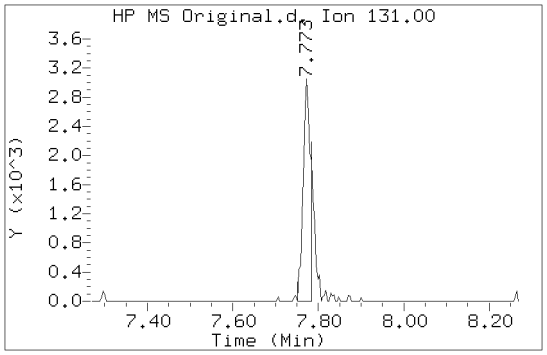
AFTER
MASS
114
AREA
4154
HEIGHT
2655
12-Aug-2023
22:44



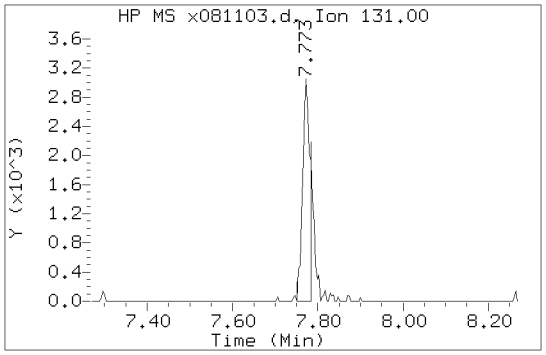
1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

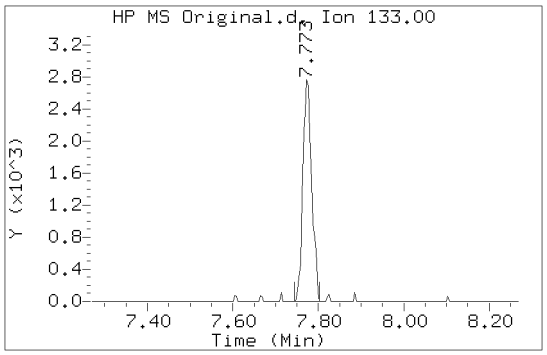
BEFORE
MASS
131
AREA
3665
HEIGHT
3052
12-Aug-2023
22:44



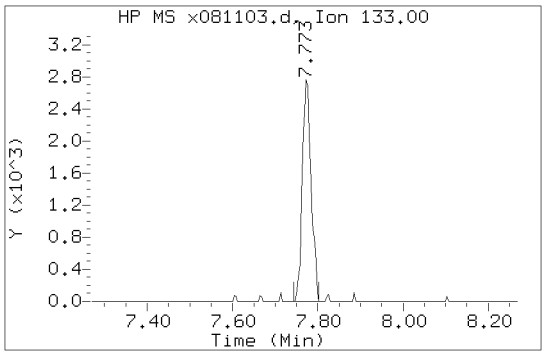
AFTER
MASS
131
AREA
3665
HEIGHT
3052
12-Aug-2023
22:44



BEFORE
MASS
133
AREA
4096
HEIGHT
2766
12-Aug-2023
22:44



AFTER
MASS
133
AREA
4096
HEIGHT
2766
12-Aug-2023
22:44



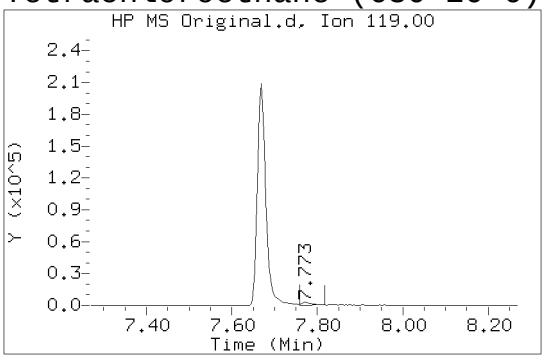
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

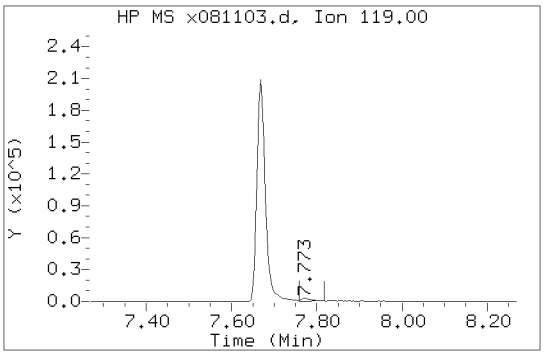
BEFORE

MASS
119
AREA
4113
HEIGHT
2897
12-Aug-2023
22:44



AFTER

MASS
119
AREA
4113
HEIGHT
2897
12-Aug-2023
22:44

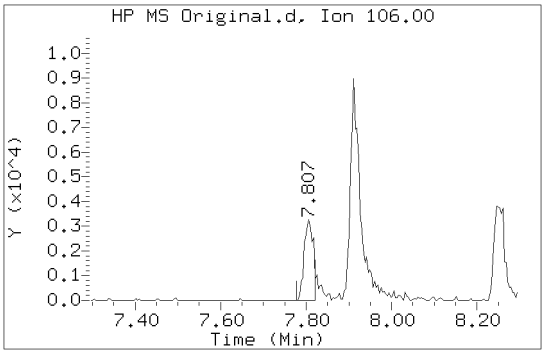


Ethylbenzene (100-41-4)

Reason Code:

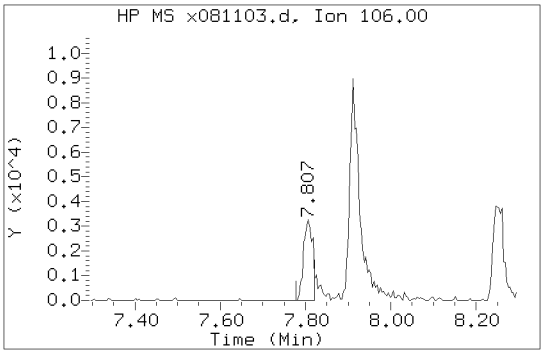
BEFORE

MASS
106
AREA
4890
HEIGHT
3268
12-Aug-2023
22:44



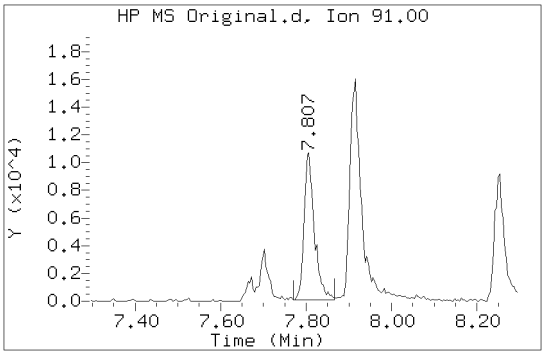
AFTER

MASS
106
AREA
4890
HEIGHT
3268
12-Aug-2023
22:44



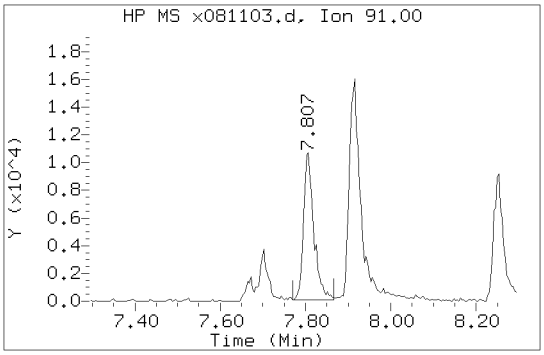
BEFORE

MASS
91
AREA
18072
HEIGHT
10624
12-Aug-2023
22:44



AFTER

MASS
91
AREA
18072
HEIGHT
10624
12-Aug-2023
22:44

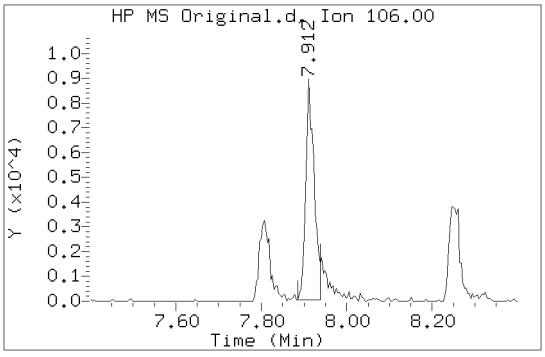


m,p-Xylenes ()

Reason Code:

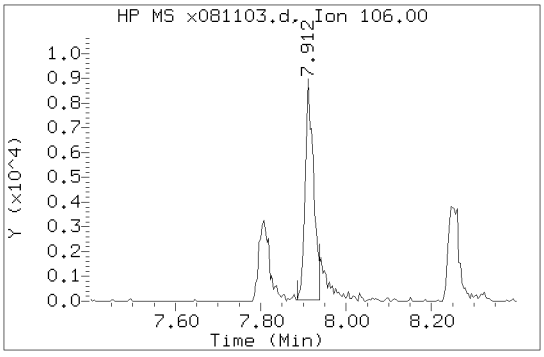
BEFORE

MASS
106
AREA
12402
HEIGHT
8912
12-Aug-2023
22:44



AFTER

MASS
106
AREA
12402
HEIGHT
8912
12-Aug-2023
22:44

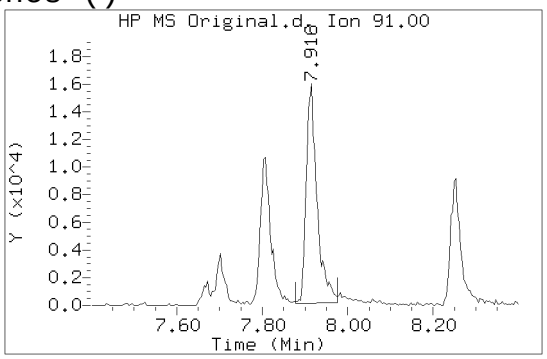


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InstruID : voa6.i
LabSampID : VSTD000.5

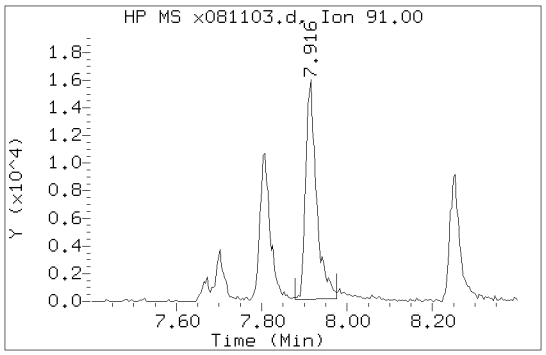
m,p-Xylenes ()

Reason Code:

BEFORE
MASS
91
AREA
28630
HEIGHT
15878
12-Aug-2023
22:44



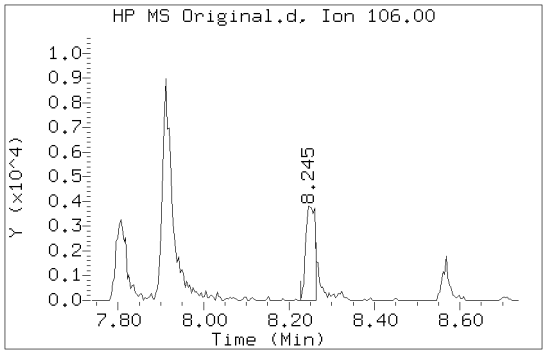
AFTER
MASS
91
AREA
28630
HEIGHT
15878
12-Aug-2023
22:44



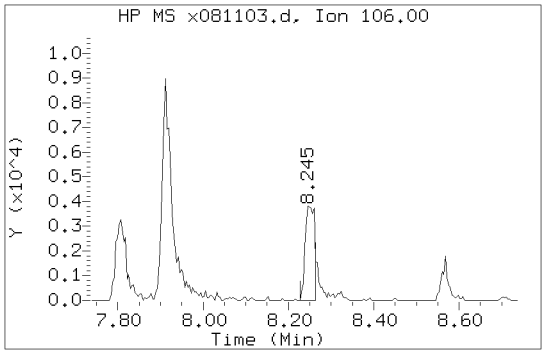
o-Xylene (95-47-6)

Reason Code:

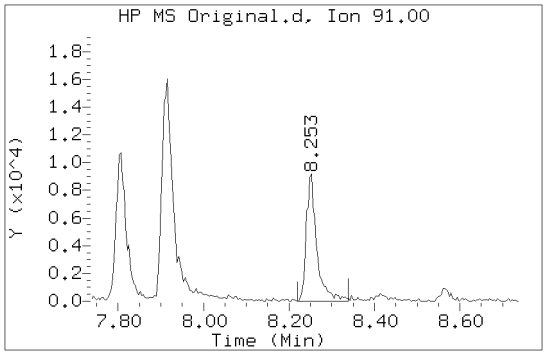
BEFORE
MASS
106
AREA
5910
HEIGHT
3818
12-Aug-2023
22:44



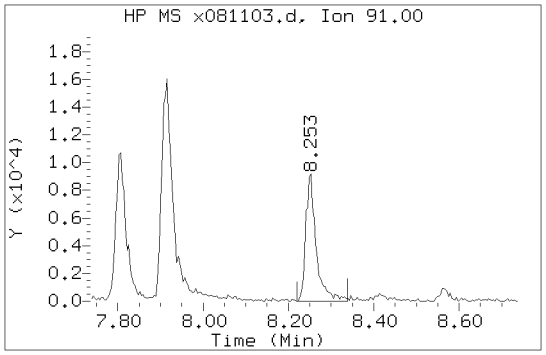
AFTER
MASS
106
AREA
5910
HEIGHT
3818
12-Aug-2023
22:44



BEFORE
MASS
91
AREA
15761
HEIGHT
9162
12-Aug-2023
22:44



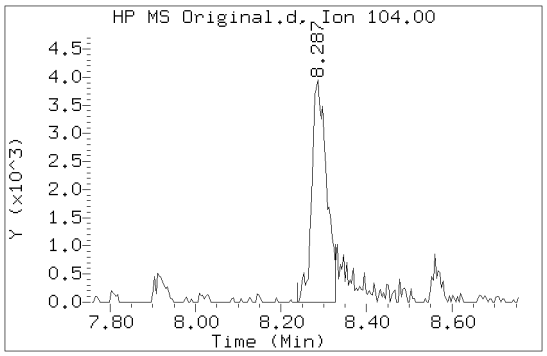
AFTER
MASS
91
AREA
15761
HEIGHT
9162
12-Aug-2023
22:44



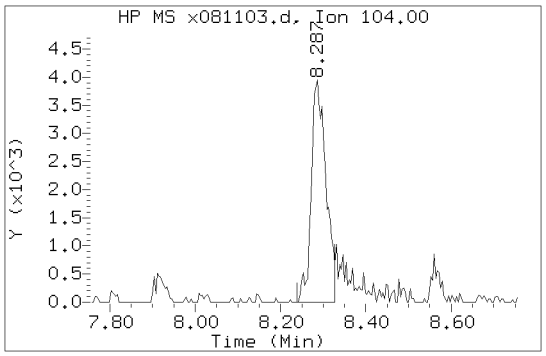
Styrene (100-42-5)

Reason Code:

BEFORE
MASS
104
AREA
9494
HEIGHT
3950
12-Aug-2023
22:44



AFTER
MASS
104
AREA
9494
HEIGHT
3950
12-Aug-2023
22:44



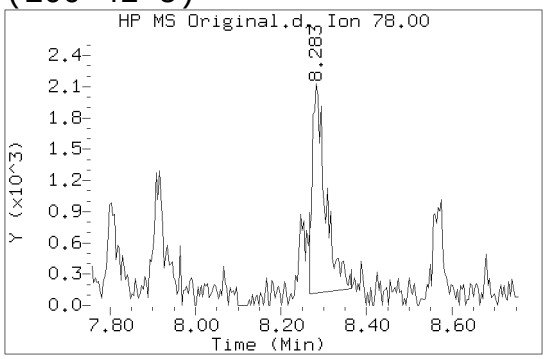
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InstruID : voa6.i
LabSampID : VSTD000.5

Styrene (100-42-5)

Reason Code:

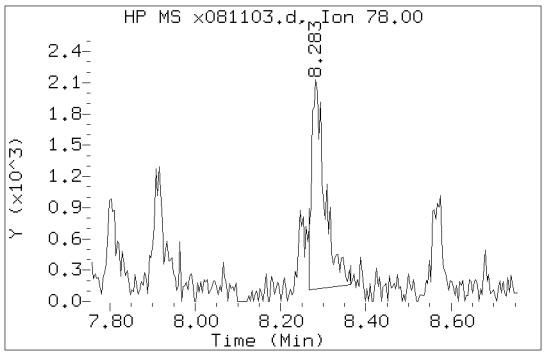
BEFORE

MASS
78
AREA
4325
HEIGHT
2009
12-Aug-2023
22:44



AFTER

MASS
78
AREA
4325
HEIGHT
2009
12-Aug-2023
22:44

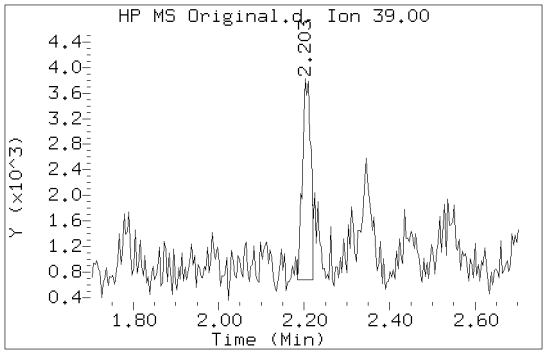


Acetonitrile (75-05-8)

Reason Code:

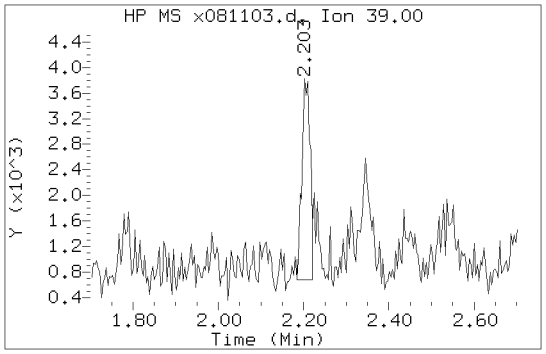
BEFORE

MASS
39
AREA
4428
HEIGHT
3143
12-Aug-2023
22:44



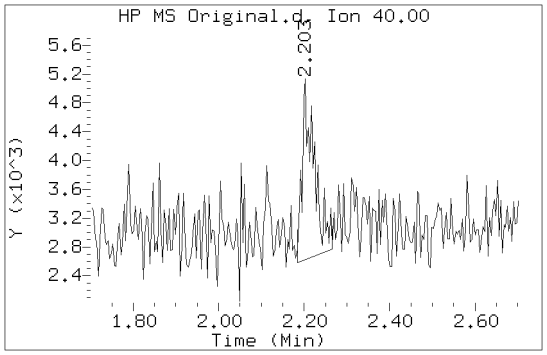
AFTER

MASS
39
AREA
4428
HEIGHT
3143
12-Aug-2023
22:44



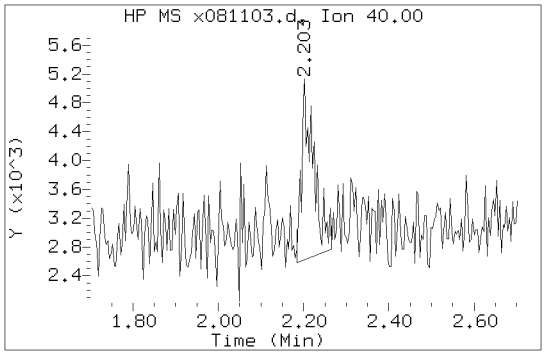
BEFORE

MASS
40
AREA
4938
HEIGHT
2505
12-Aug-2023
22:44



AFTER

MASS
40
AREA
4938
HEIGHT
2505
12-Aug-2023
22:44

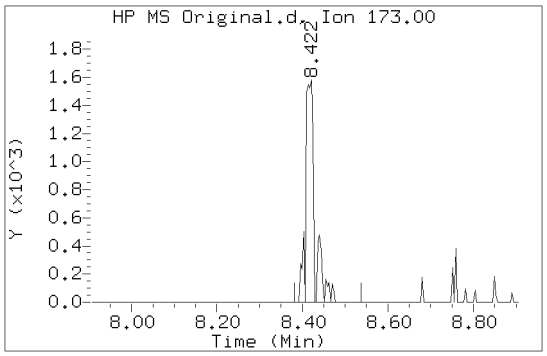


Bromoform (75-25-2)

Reason Code:

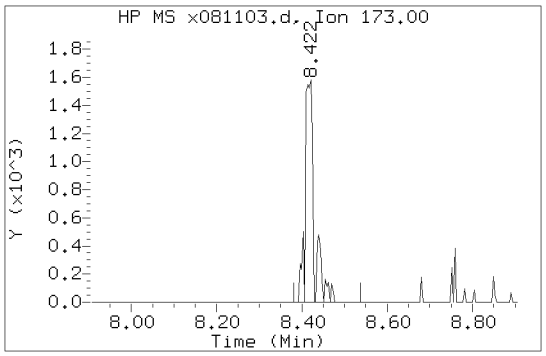
BEFORE

MASS
173
AREA
2332
HEIGHT
1581
12-Aug-2023
22:44



AFTER

MASS
173
AREA
2332
HEIGHT
1581
12-Aug-2023
22:44

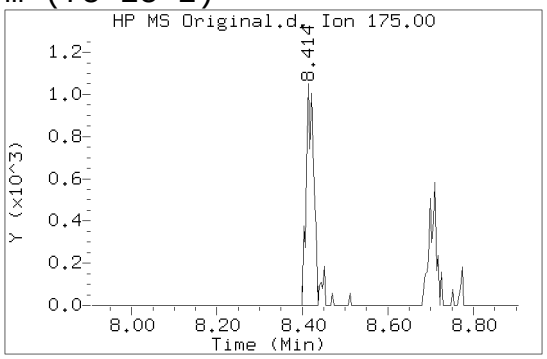


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InstruID : voa6.i
LabSampID : VSTD000.5

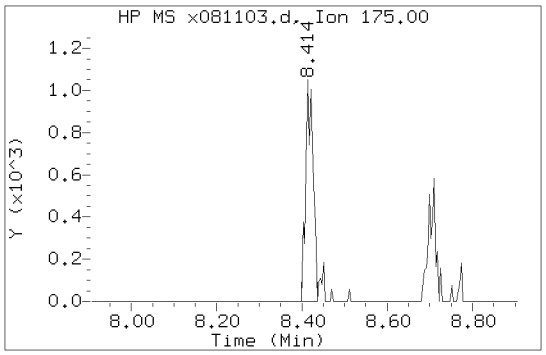
Bromoform (75-25-2)

Reason Code:

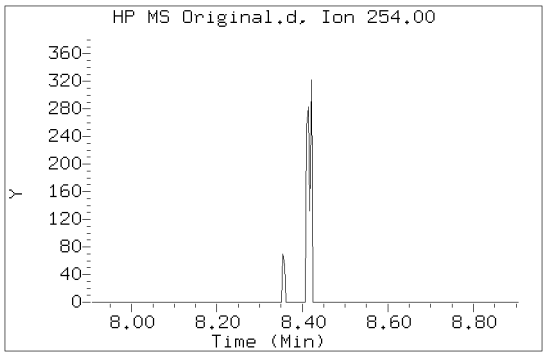
BEFORE
MASS
175
AREA
1279
HEIGHT
1051
12-Aug-2023
22:44



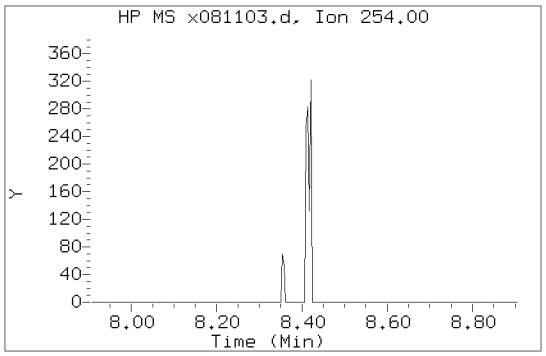
AFTER
MASS
175
AREA
1279
HEIGHT
1051
12-Aug-2023
22:44



BEFORE
MASS
254
AREA
0
HEIGHT
0
12-Aug-2023
22:44



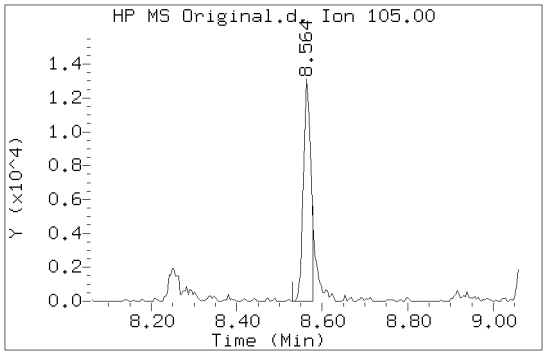
AFTER
MASS
254
AREA
0
HEIGHT
0
12-Aug-2023
22:44



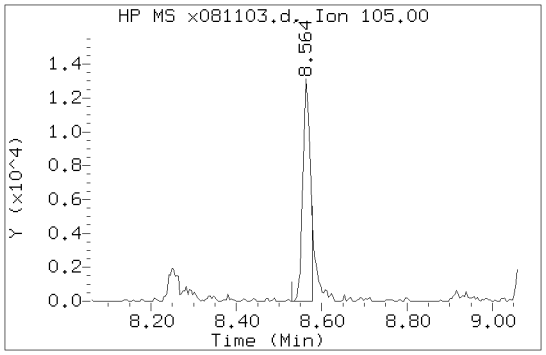
Isopropylbenzene (98-82-8)

Reason Code:

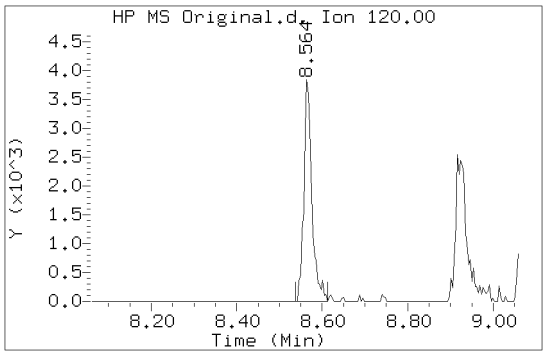
BEFORE
MASS
105
AREA
16385
HEIGHT
13126
12-Aug-2023
22:44



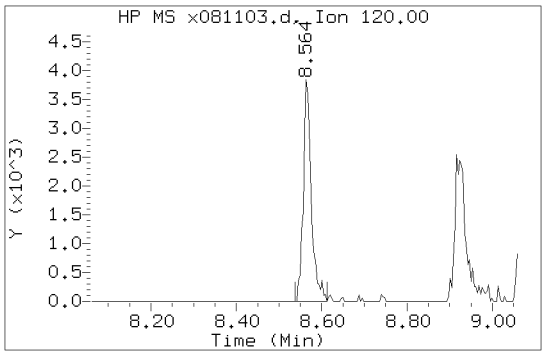
AFTER
MASS
105
AREA
16385
HEIGHT
13126
12-Aug-2023
22:44



BEFORE
MASS
120
AREA
5147
HEIGHT
3841
12-Aug-2023
22:44



AFTER
MASS
120
AREA
5147
HEIGHT
3841
12-Aug-2023
22:44

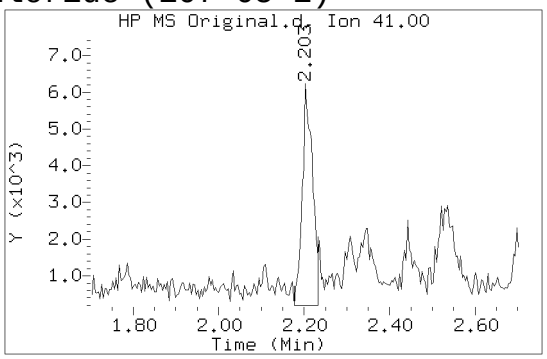


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InstruID : voa6.i
LabSampID : VSTD000.5

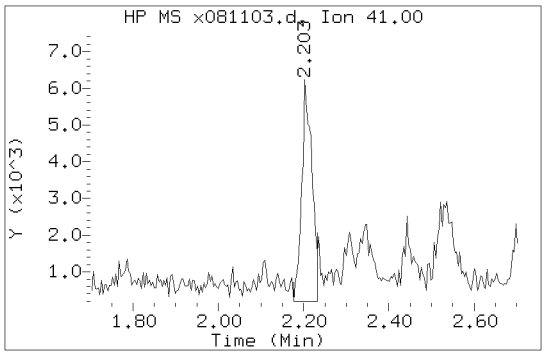
Allyl Chloride (107-05-1)

Reason Code:

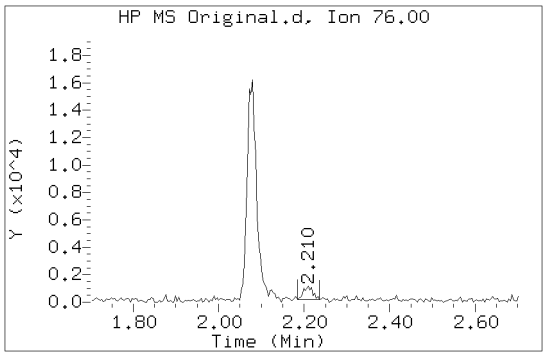
BEFORE
MASS
41
AREA
10300
HEIGHT
6035
12-Aug-2023
22:44



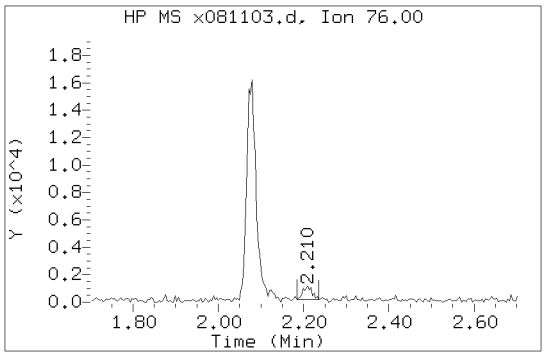
AFTER
MASS
41
AREA
10300
HEIGHT
6035
12-Aug-2023
22:44



BEFORE
MASS
76
AREA
1547
HEIGHT
1020
12-Aug-2023
22:44



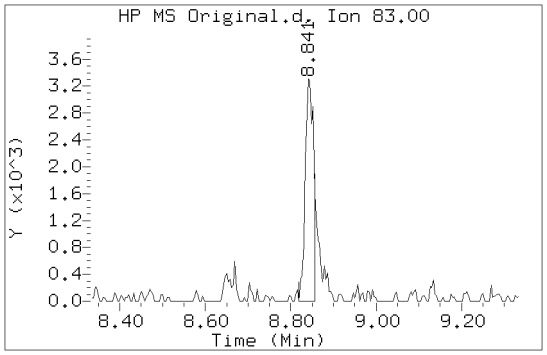
AFTER
MASS
76
AREA
1547
HEIGHT
1020
12-Aug-2023
22:44



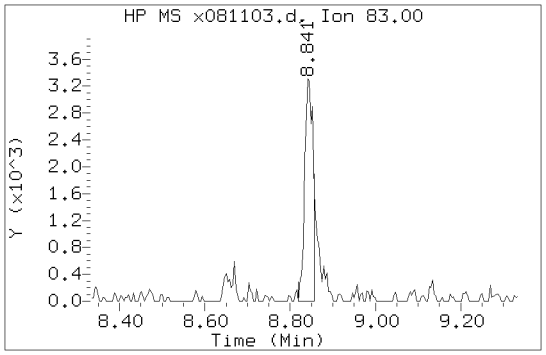
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

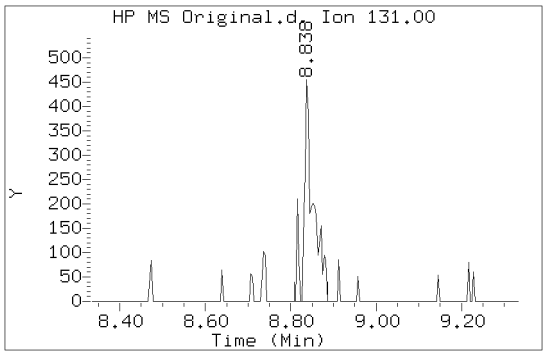
BEFORE
MASS
83
AREA
4493
HEIGHT
3308
12-Aug-2023
22:44



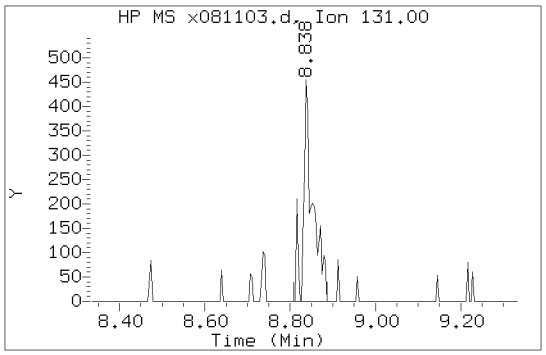
AFTER
MASS
83
AREA
4493
HEIGHT
3308
12-Aug-2023
22:44



BEFORE
MASS
131
AREA
703
HEIGHT
455
12-Aug-2023
22:44



AFTER
MASS
131
AREA
703
HEIGHT
455
12-Aug-2023
22:44

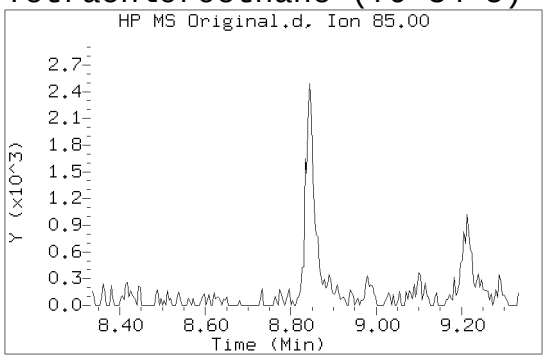


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InstruID : voa6.i
LabSampID : VSTD000.5

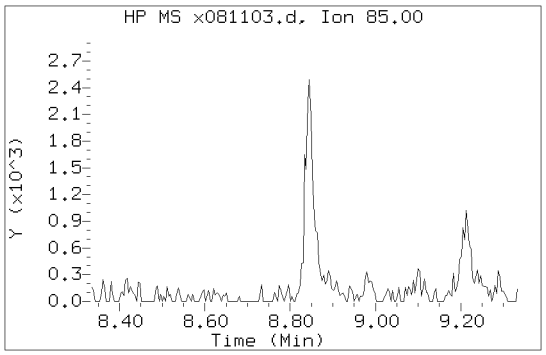
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
85
AREA
0
HEIGHT
0
12-Aug-2023
22:44



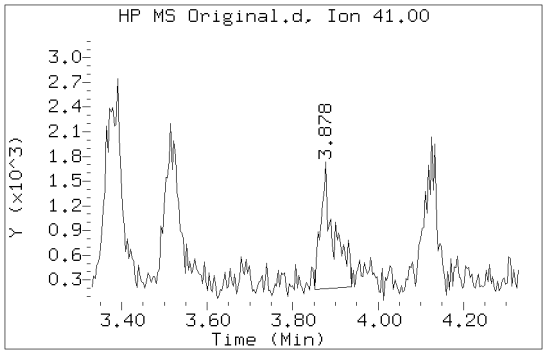
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Aug-2023
22:44



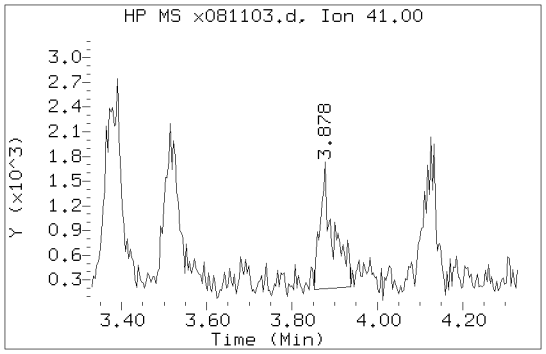
Methacrylonitrile (126-98-7)

Reason Code:

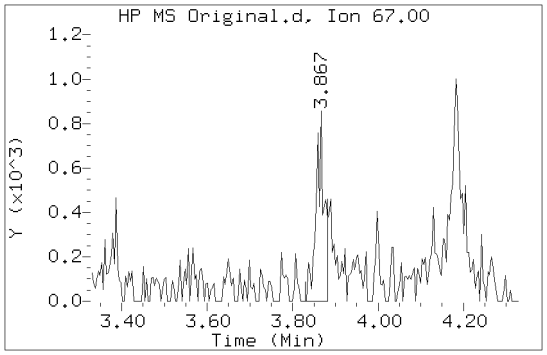
BEFORE
MASS
41
AREA
3257
HEIGHT
1536
12-Aug-2023
22:44



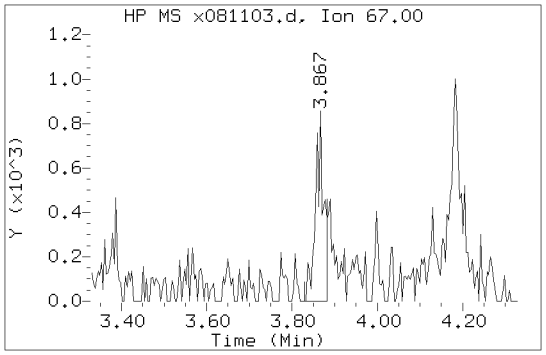
AFTER
MASS
41
AREA
3257
HEIGHT
1536
12-Aug-2023
22:44



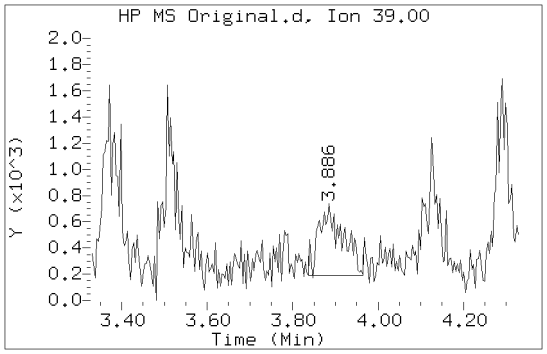
BEFORE
MASS
67
AREA
1114
HEIGHT
856
12-Aug-2023
22:44



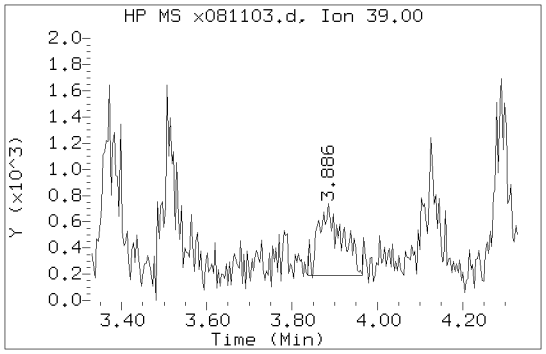
AFTER
MASS
67
AREA
1114
HEIGHT
856
12-Aug-2023
22:44



BEFORE
MASS
39
AREA
2083
HEIGHT
549
12-Aug-2023
22:44



AFTER
MASS
39
AREA
2083
HEIGHT
549
12-Aug-2023
22:44

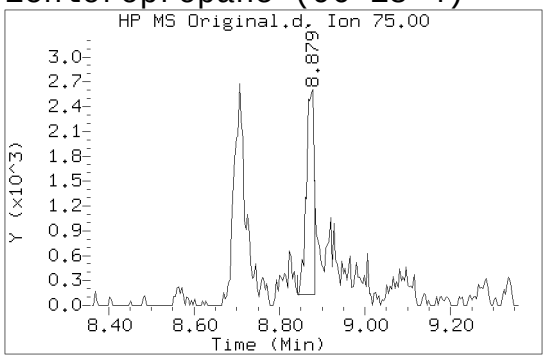


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InstruID : voa6.i
LabSampID : VSTD000.5

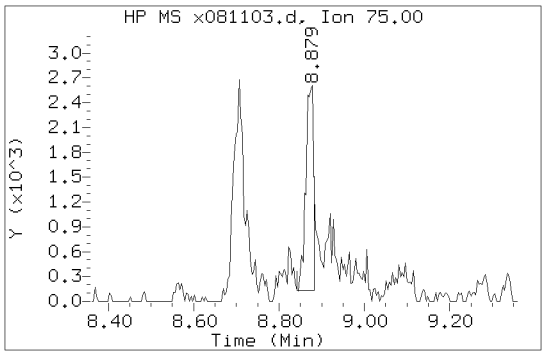
1,2,3-Trichloropropane (96-18-4)

Reason Code:

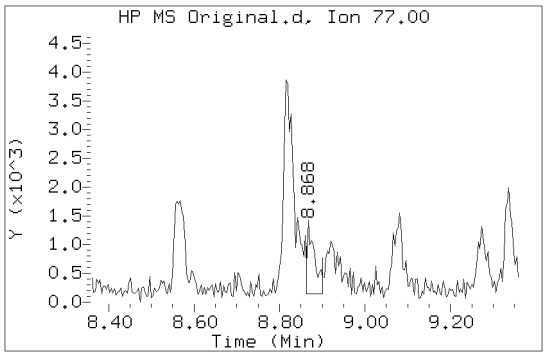
BEFORE
MASS
75
AREA
3166
HEIGHT
2481
12-Aug-2023
22:44



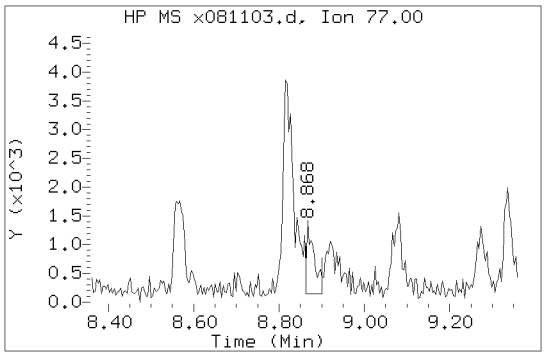
AFTER
MASS
75
AREA
3166
HEIGHT
2481
12-Aug-2023
22:44



BEFORE
MASS
77
AREA
1546
HEIGHT
1276
12-Aug-2023
22:44



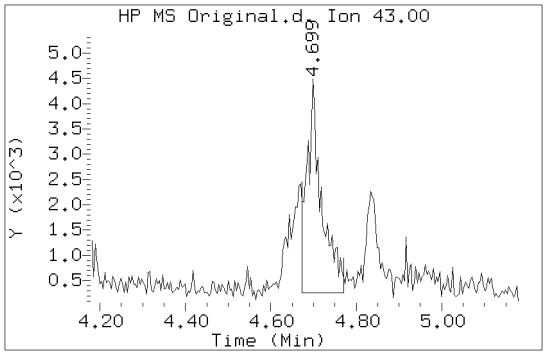
AFTER
MASS
77
AREA
1546
HEIGHT
1276
12-Aug-2023
22:44



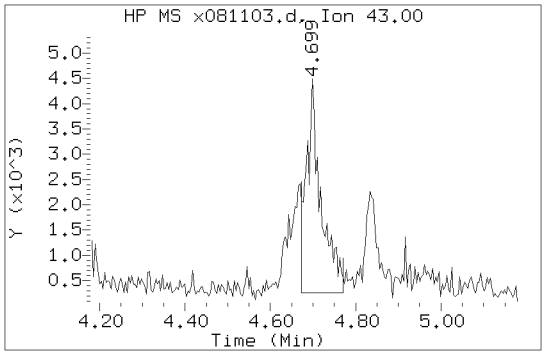
Isobutyl Alcohol (78-83-1)

Reason Code:

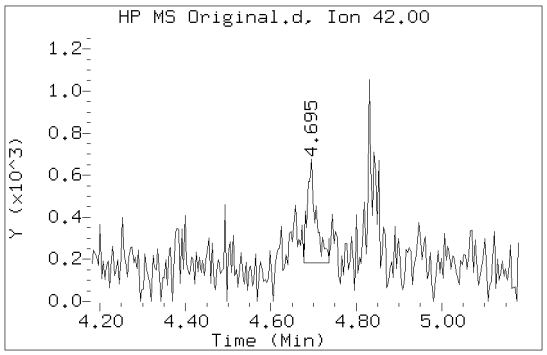
BEFORE
MASS
43
AREA
10205
HEIGHT
4228
12-Aug-2023
22:44



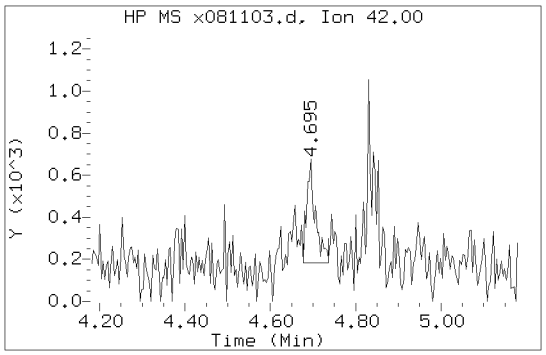
AFTER
MASS
43
AREA
10205
HEIGHT
4228
12-Aug-2023
22:44



BEFORE
MASS
42
AREA
697
HEIGHT
494
12-Aug-2023
22:44



AFTER
MASS
42
AREA
697
HEIGHT
494
12-Aug-2023
22:44



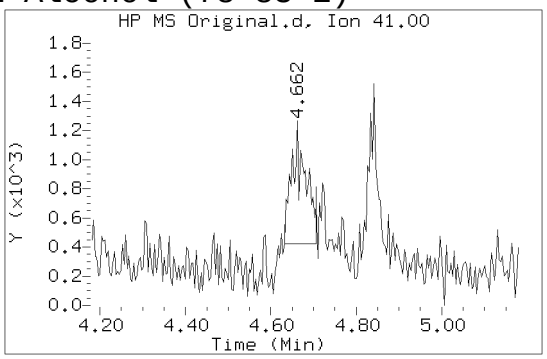
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InstruID : voa6.i
LabSampID : VSTD000.5

Isobutyl Alcohol (78-83-1)

Reason Code:

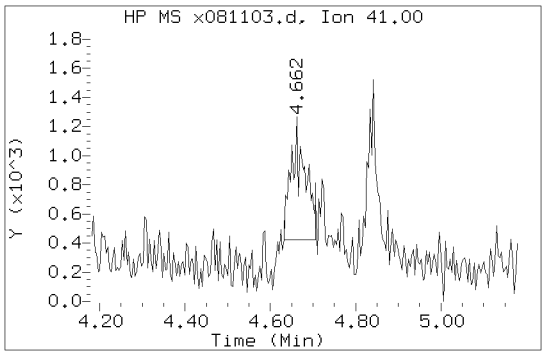
BEFORE

MASS
41
AREA
1941
HEIGHT
844
12-Aug-2023
22:44



AFTER

MASS
41
AREA
1941
HEIGHT
844
12-Aug-2023
22:44

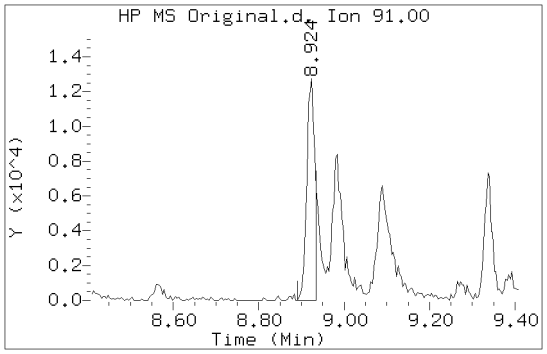


n-Propylbenzene (106-65-1)

Reason Code:

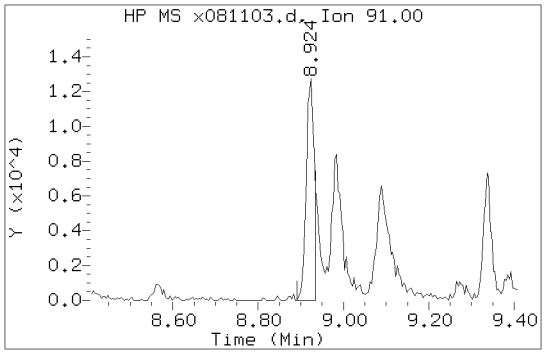
BEFORE

MASS
91
AREA
17092
HEIGHT
12741
12-Aug-2023
22:44



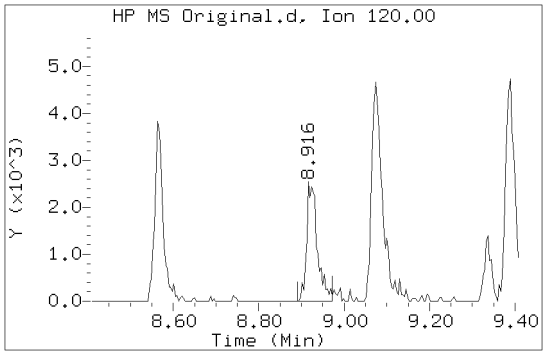
AFTER

MASS
91
AREA
17092
HEIGHT
12741
12-Aug-2023
22:44



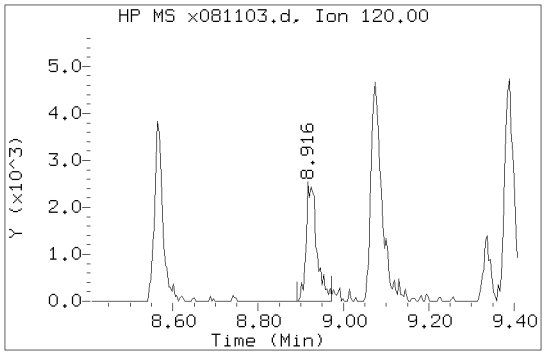
BEFORE

MASS
120
AREA
4506
HEIGHT
2542
12-Aug-2023
22:44



AFTER

MASS
120
AREA
4506
HEIGHT
2542
12-Aug-2023
22:44

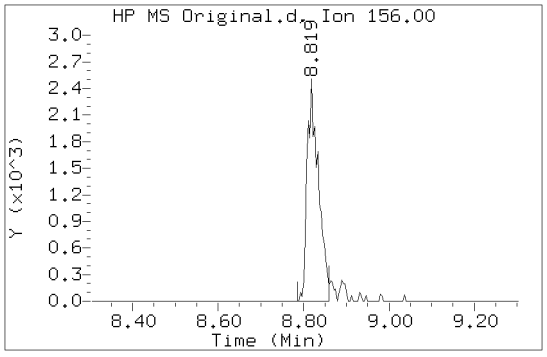


Bromobenzene (108-86-1)

Reason Code:

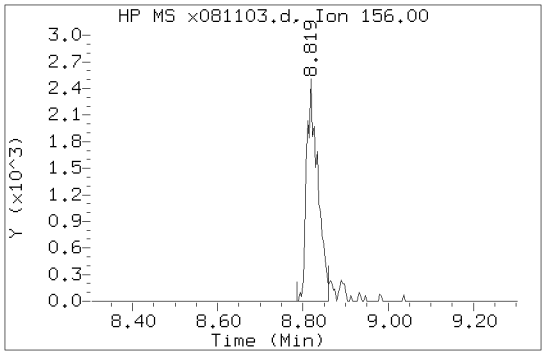
BEFORE

MASS
156
AREA
4612
HEIGHT
2508
12-Aug-2023
22:44



AFTER

MASS
156
AREA
4612
HEIGHT
2508
12-Aug-2023
22:44

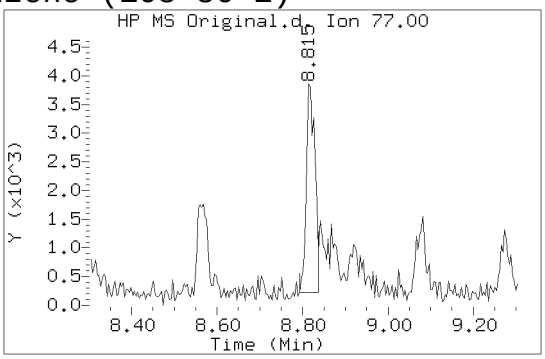


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InstruID : voa6.i
LabSampID : VSTD000.5

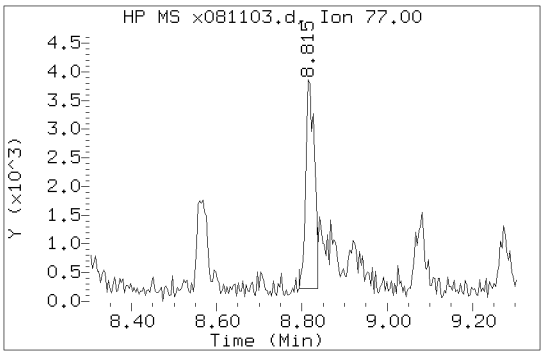
Bromobenzene (108-86-1)

Reason Code:

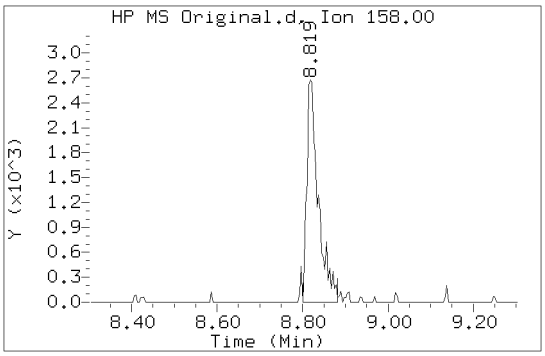
BEFORE
MASS
77
AREA
5162
HEIGHT
3640
12-Aug-2023
22:44



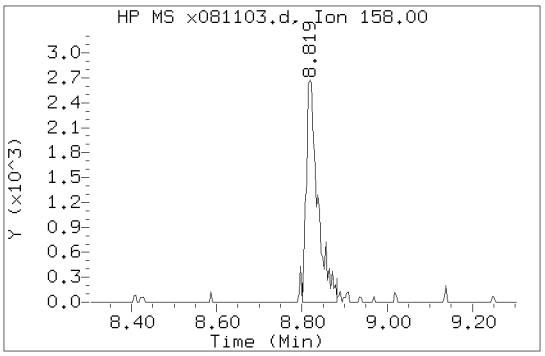
AFTER
MASS
77
AREA
5162
HEIGHT
3640
12-Aug-2023
22:44



BEFORE
MASS
158
AREA
4980
HEIGHT
2675
12-Aug-2023
22:44



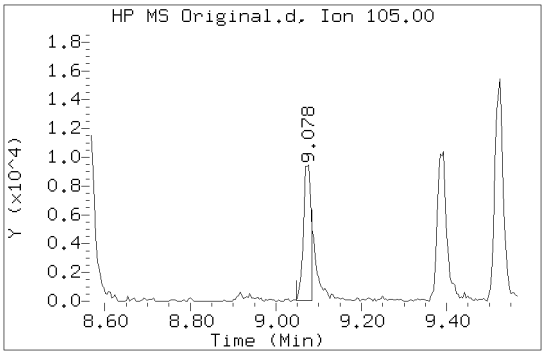
AFTER
MASS
158
AREA
4980
HEIGHT
2675
12-Aug-2023
22:44



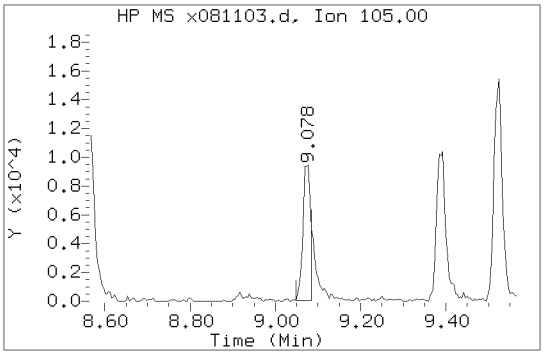
1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

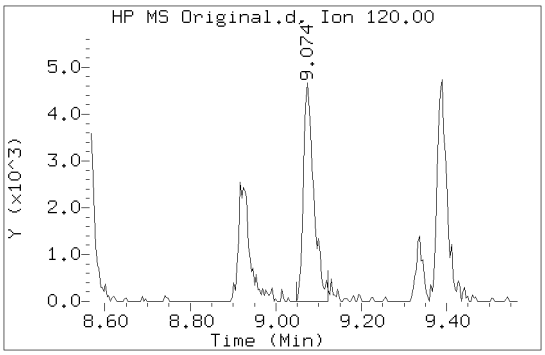
BEFORE
MASS
105
AREA
12006
HEIGHT
9424
12-Aug-2023
22:44



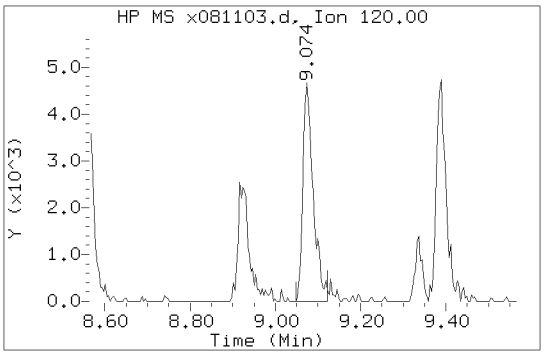
AFTER
MASS
105
AREA
12006
HEIGHT
9424
12-Aug-2023
22:44



BEFORE
MASS
120
AREA
8039
HEIGHT
4663
12-Aug-2023
22:44



AFTER
MASS
120
AREA
8039
HEIGHT
4663
12-Aug-2023
22:44

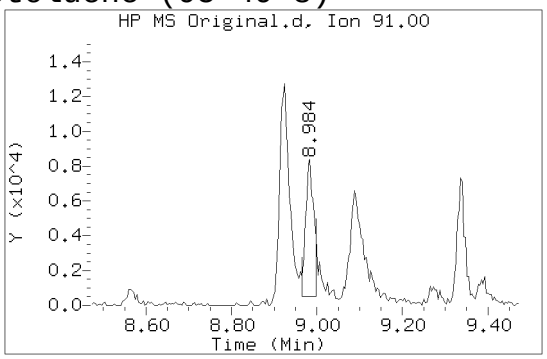


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InstruID : voa6.i
LabSampID : VSTD000.5

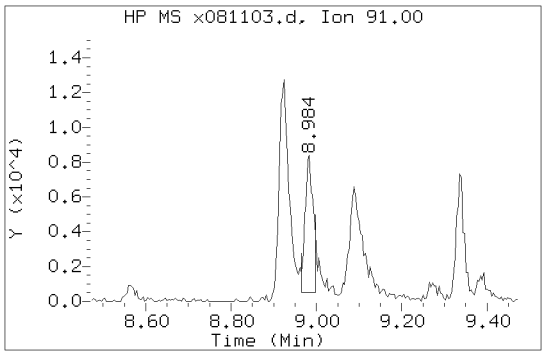
2-Chlorotoluene (95-49-8)

Reason Code:

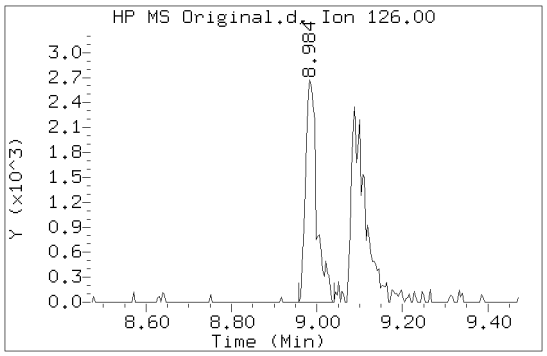
BEFORE
MASS
91
AREA
10667
HEIGHT
7878
12-Aug-2023
22:44



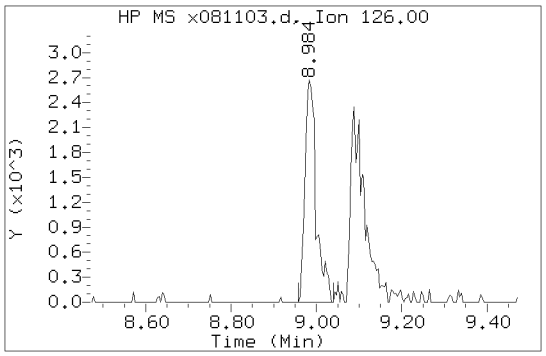
AFTER
MASS
91
AREA
10667
HEIGHT
7878
12-Aug-2023
22:44



BEFORE
MASS
126
AREA
4942
HEIGHT
2672
12-Aug-2023
22:44



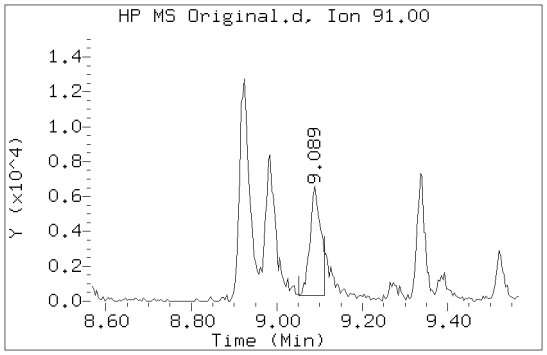
AFTER
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126
AREA
4942
HEIGHT
2672
12-Aug-2023
22:44



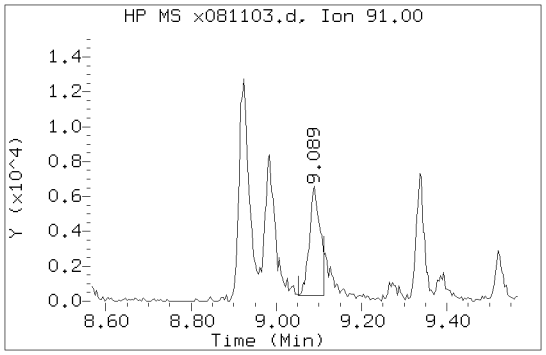
4-Chlorotoluene (106-43-4)

Reason Code:

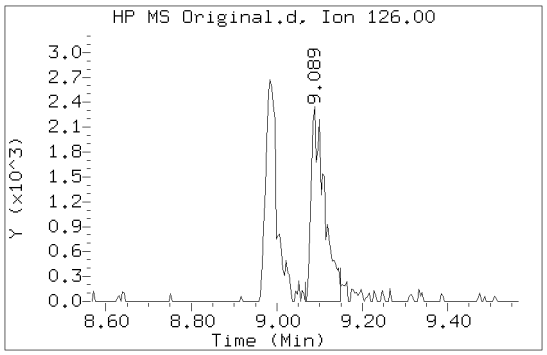
BEFORE
MASS
91
AREA
10970
HEIGHT
6277
12-Aug-2023
22:44



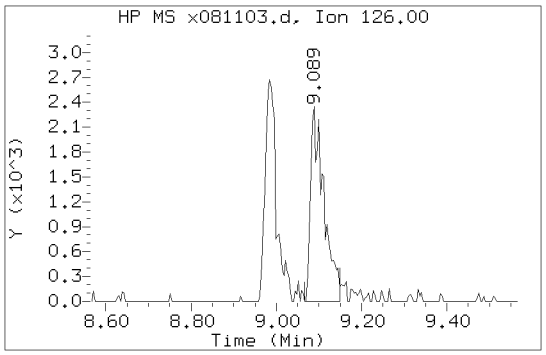
AFTER
MASS
91
AREA
10970
HEIGHT
6277
12-Aug-2023
22:44



BEFORE
MASS
126
AREA
5099
HEIGHT
2349
12-Aug-2023
22:44



AFTER
MASS
126
AREA
5099
HEIGHT
2349
12-Aug-2023
22:44

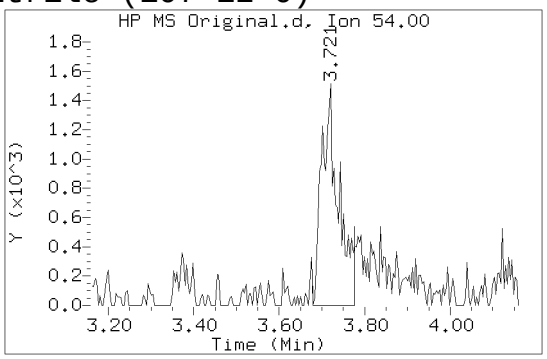


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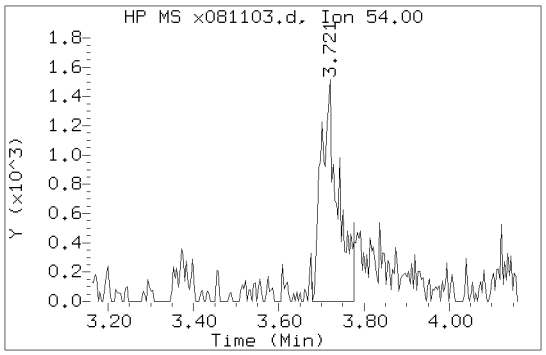
Propionitrile (107-12-0)

Reason Code:

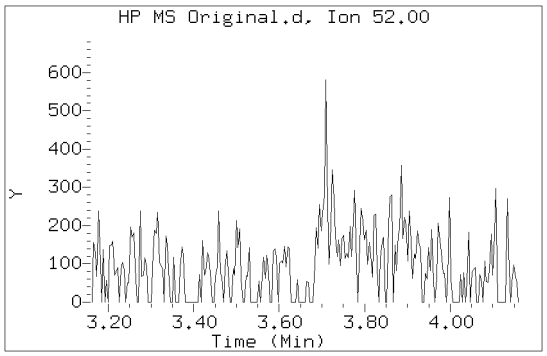
BEFORE
MASS
54
AREA
4117
HEIGHT
1515
12-Aug-2023
22:44



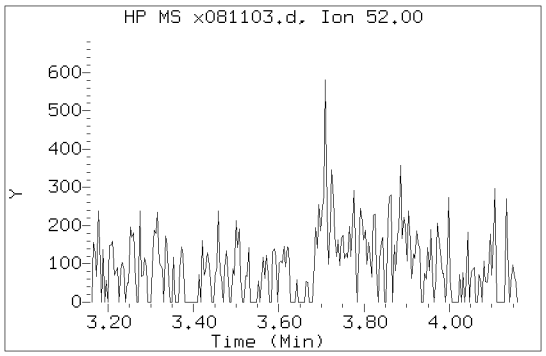
AFTER
MASS
54
AREA
4117
HEIGHT
1515
12-Aug-2023
22:44



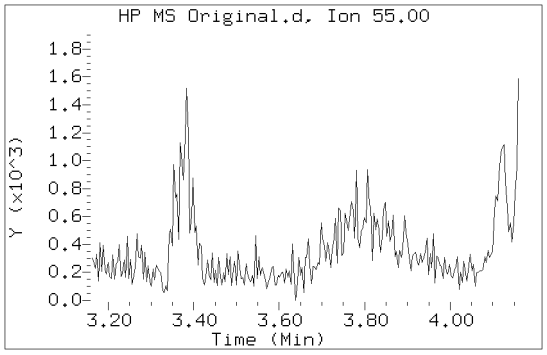
BEFORE
MASS
52
AREA
0
HEIGHT
0
12-Aug-2023
22:44



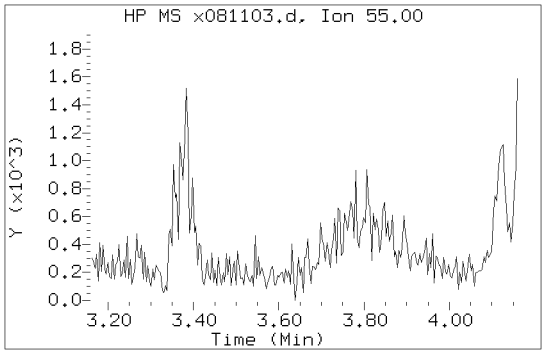
AFTER
MASS
52
AREA
0
HEIGHT
0
12-Aug-2023
22:44



BEFORE
MASS
55
AREA
0
HEIGHT
0
12-Aug-2023
22:44



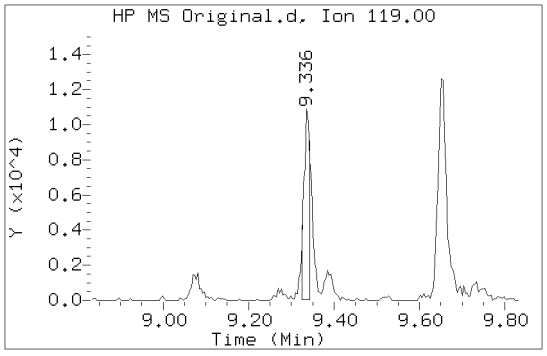
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MASS
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HEIGHT
0
12-Aug-2023
22:44



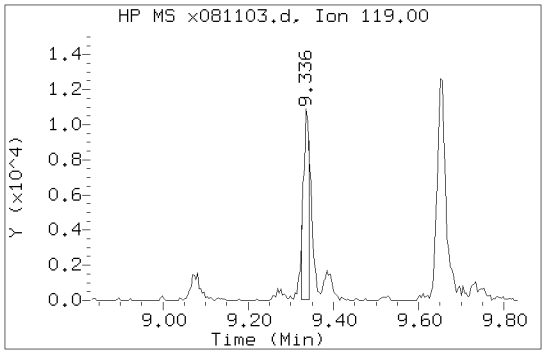
tert-Butylbenzene (98-06-6)

Reason Code:

BEFORE
MASS
119
AREA
10385
HEIGHT
10865
12-Aug-2023
22:44



AFTER
MASS
119
AREA
10385
HEIGHT
10865
12-Aug-2023
22:44

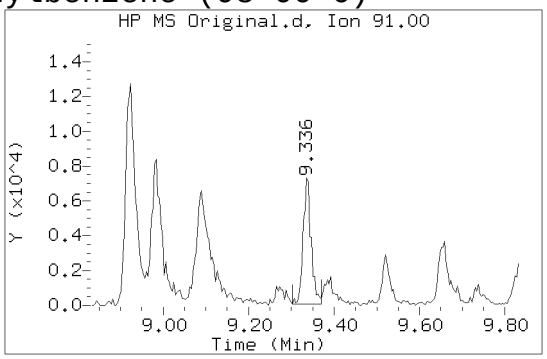


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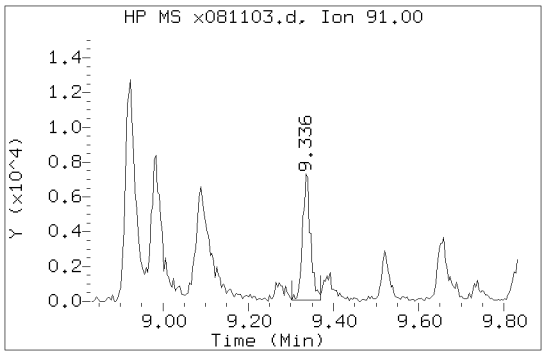
tert-Butylbenzene (98-06-6)

Reason Code:

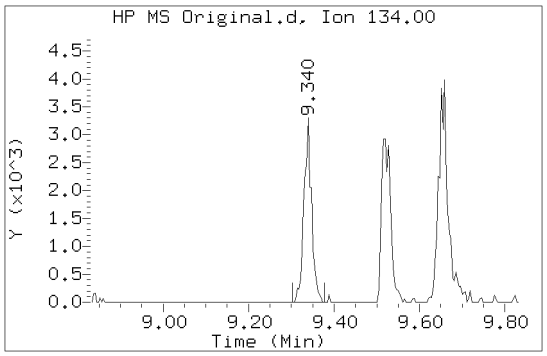
BEFORE
MASS
91
AREA
9489
HEIGHT
7277
12-Aug-2023
22:44



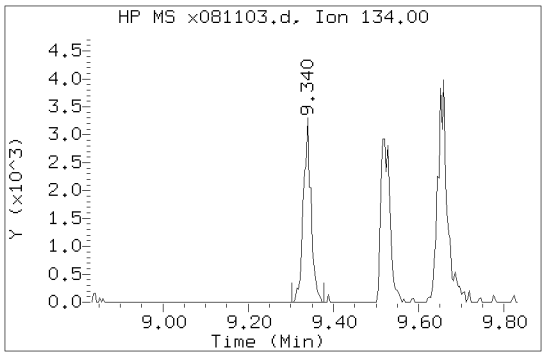
AFTER
MASS
91
AREA
9489
HEIGHT
7277
12-Aug-2023
22:44



BEFORE
MASS
134
AREA
4093
HEIGHT
3299
12-Aug-2023
22:44



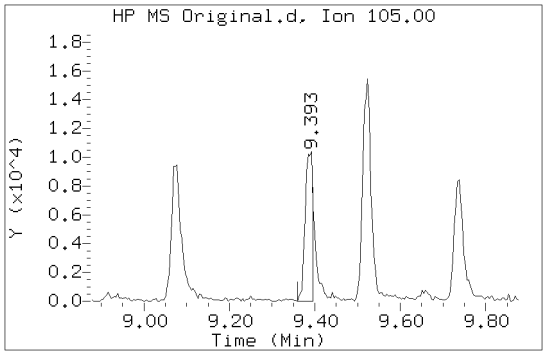
AFTER
MASS
134
AREA
4093
HEIGHT
3299
12-Aug-2023
22:44



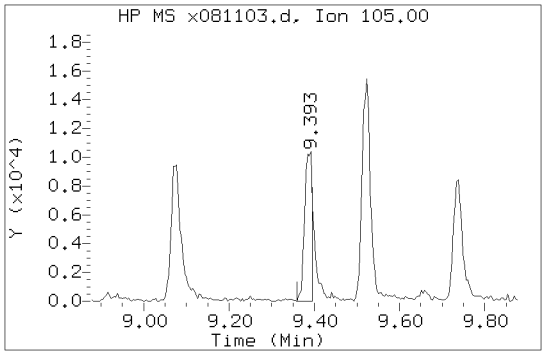
1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

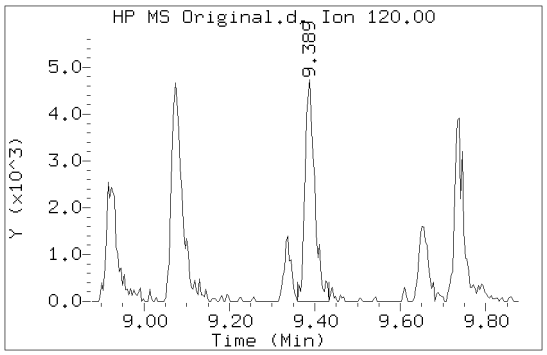
BEFORE
MASS
105
AREA
12812
HEIGHT
10393
12-Aug-2023
22:44



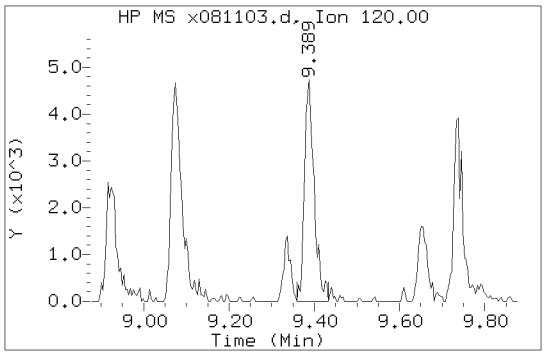
AFTER
MASS
105
AREA
12812
HEIGHT
10393
12-Aug-2023
22:44



BEFORE
MASS
120
AREA
7493
HEIGHT
4736
12-Aug-2023
22:44



AFTER
MASS
120
AREA
7493
HEIGHT
4736
12-Aug-2023
22:44

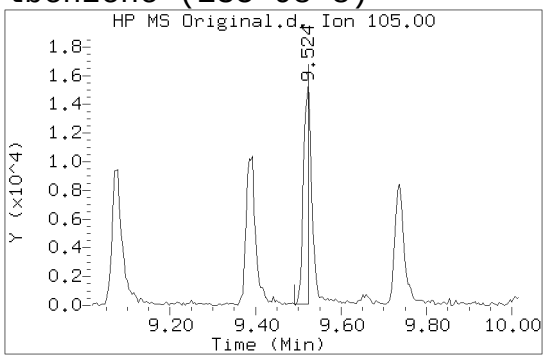


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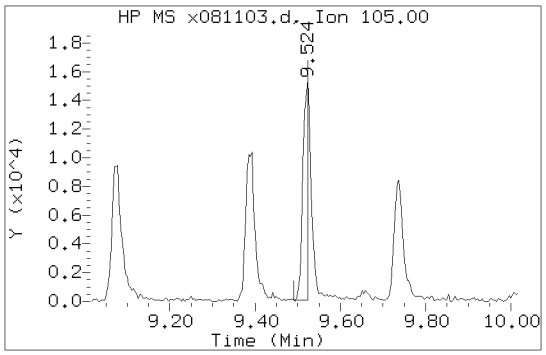
sec-Butylbenzene (135-98-8)

Reason Code:

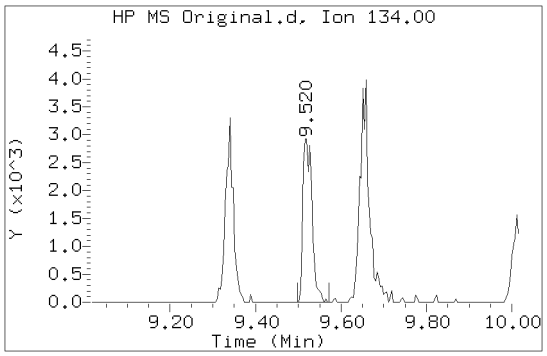
BEFORE
MASS
105
AREA
13358
HEIGHT
15342
12-Aug-2023
22:44



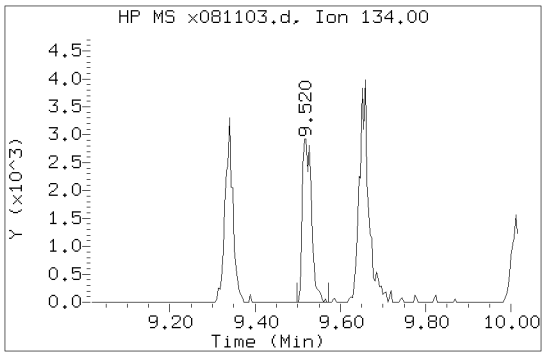
AFTER
MASS
105
AREA
13358
HEIGHT
15342
12-Aug-2023
22:44



BEFORE
MASS
134
AREA
4422
HEIGHT
2927
12-Aug-2023
22:44



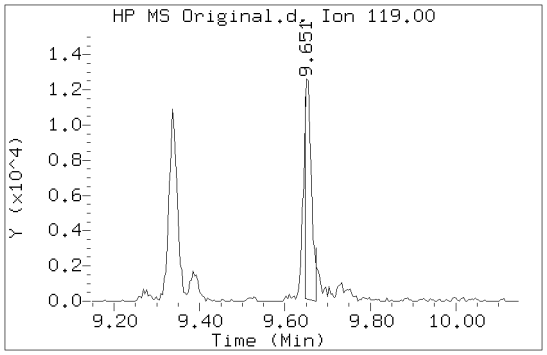
AFTER
MASS
134
AREA
4422
HEIGHT
2927
12-Aug-2023
22:44



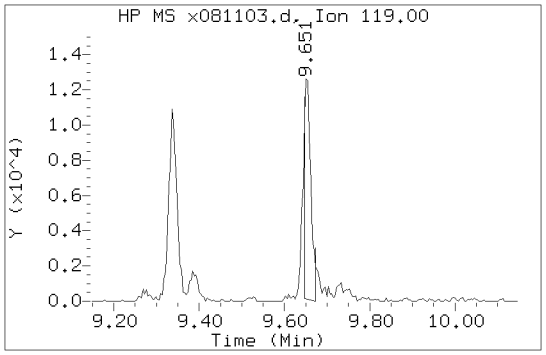
p-Isopropyltoluene (99-87-6)

Reason Code:

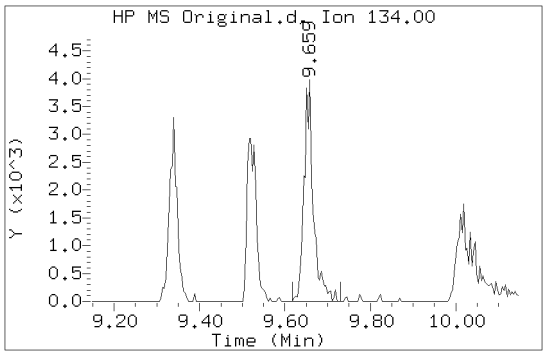
BEFORE
MASS
119
AREA
13394
HEIGHT
12490
12-Aug-2023
22:44



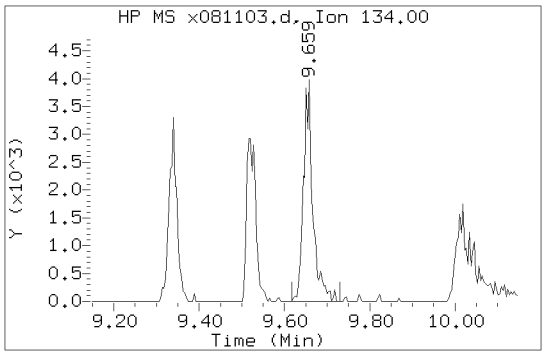
AFTER
MASS
119
AREA
13394
HEIGHT
12490
12-Aug-2023
22:44



BEFORE
MASS
134
AREA
6077
HEIGHT
3982
12-Aug-2023
22:44



AFTER
MASS
134
AREA
6077
HEIGHT
3982
12-Aug-2023
22:44

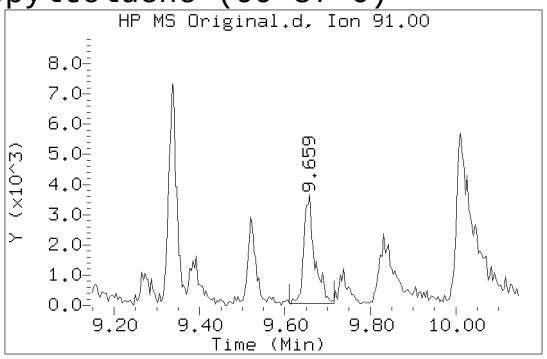


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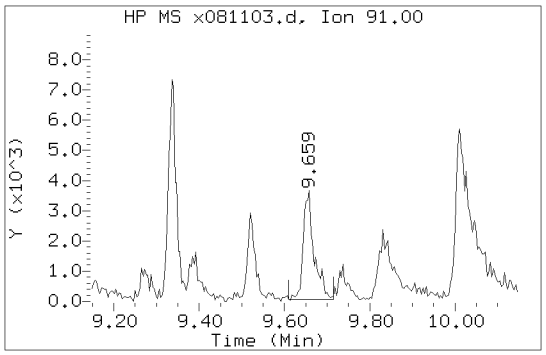
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
91
AREA
6454
HEIGHT
3607
12-Aug-2023
22:44



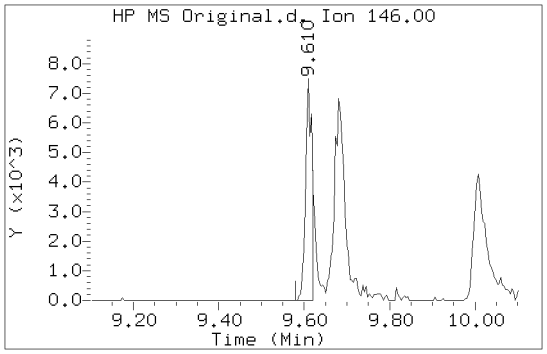
AFTER
MASS
91
AREA
6454
HEIGHT
3607
12-Aug-2023
22:44



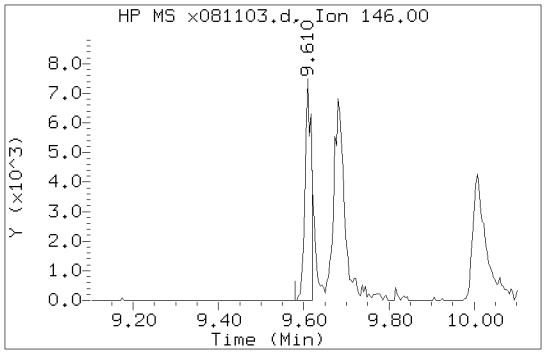
1,3-Dichlorobenzene (541-73-1)

Reason Code:

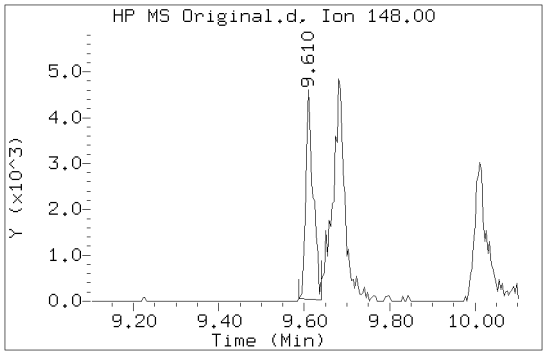
BEFORE
MASS
146
AREA
7795
HEIGHT
7495
12-Aug-2023
22:44



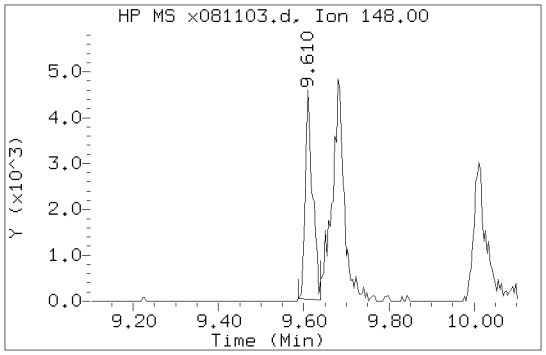
AFTER
MASS
146
AREA
7795
HEIGHT
7495
12-Aug-2023
22:44



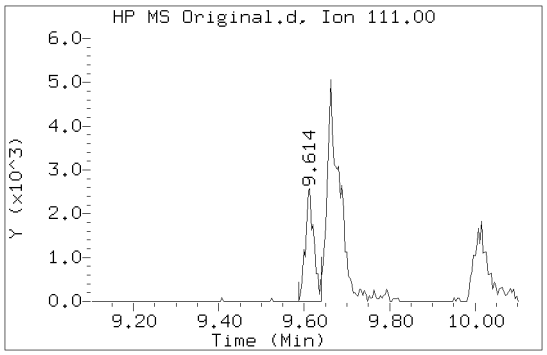
BEFORE
MASS
148
AREA
5529
HEIGHT
4571
12-Aug-2023
22:44



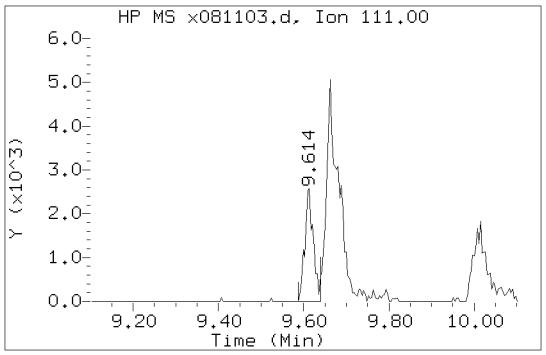
AFTER
MASS
148
AREA
5529
HEIGHT
4571
12-Aug-2023
22:44



BEFORE
MASS
111
AREA
3654
HEIGHT
2574
12-Aug-2023
22:44



AFTER
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111
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3654
HEIGHT
2574
12-Aug-2023
22:44

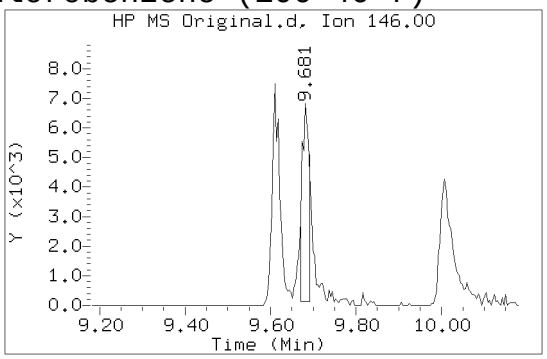


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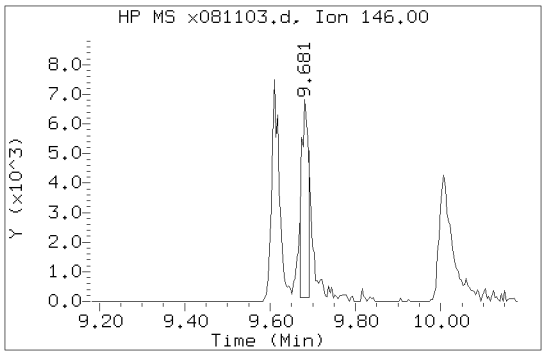
1,4-Dichlorobenzene (106-46-7)

Reason Code:

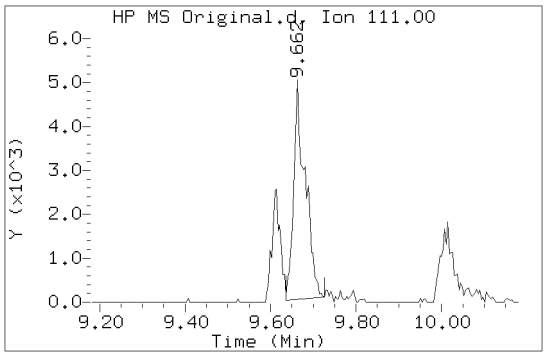
BEFORE
MASS
146
AREA
8042
HEIGHT
6690
12-Aug-2023
22:44



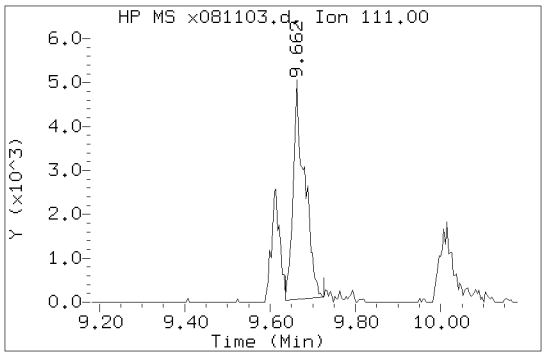
AFTER
MASS
146
AREA
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HEIGHT
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12-Aug-2023
22:44



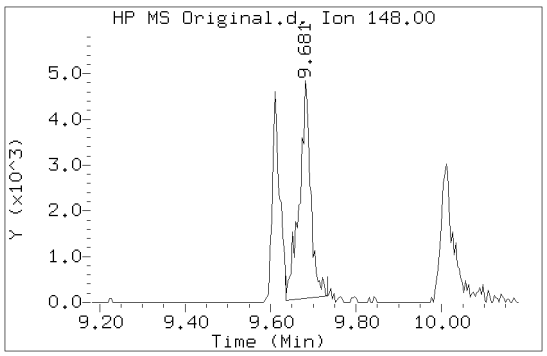
BEFORE
MASS
111
AREA
9494
HEIGHT
4997
12-Aug-2023
22:44



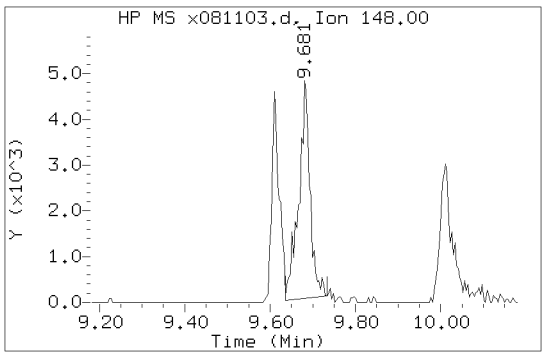
AFTER
MASS
111
AREA
9494
HEIGHT
4997
12-Aug-2023
22:44



BEFORE
MASS
148
AREA
8948
HEIGHT
4758
12-Aug-2023
22:44



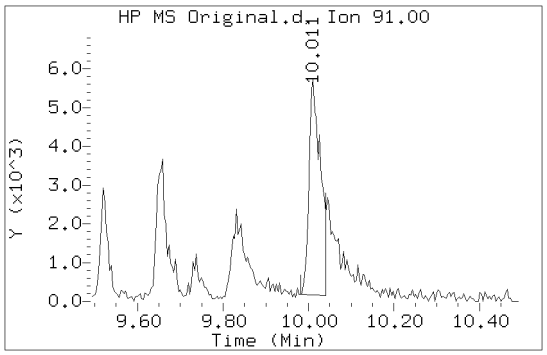
AFTER
MASS
148
AREA
8948
HEIGHT
4758
12-Aug-2023
22:44



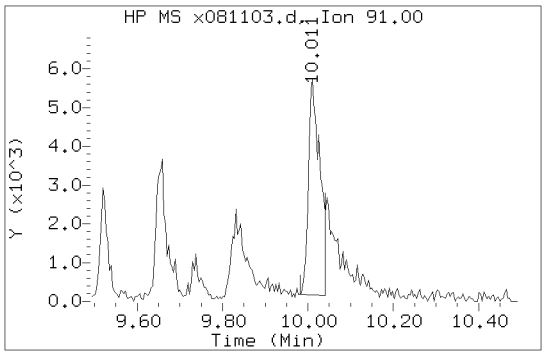
n-Butylbenzene (104-51-8)

Reason Code:

BEFORE
MASS
91
AREA
10518
HEIGHT
5560
12-Aug-2023
22:44



AFTER
MASS
91
AREA
10518
HEIGHT
5560
12-Aug-2023
22:44

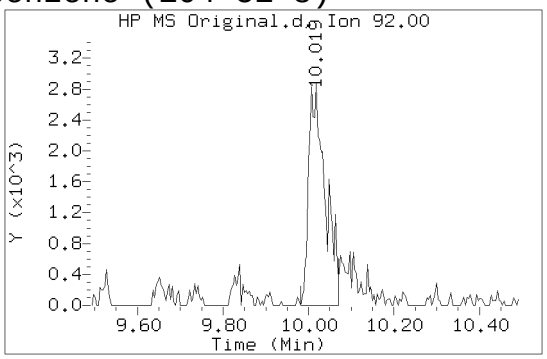


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

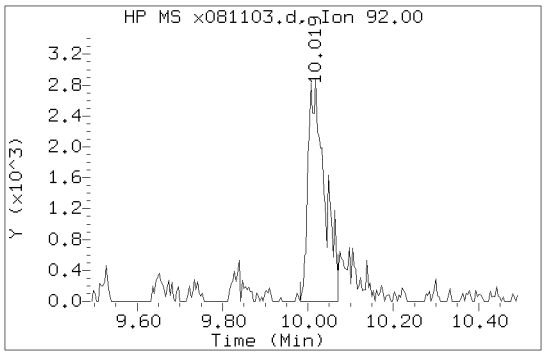
n-Butylbenzene (104-51-8)

Reason Code:

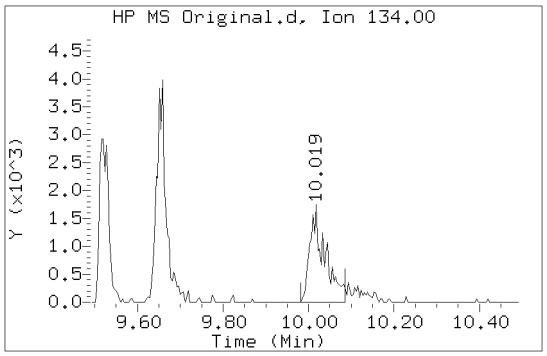
BEFORE
MASS
92
AREA
7722
HEIGHT
2870
12-Aug-2023
22:44



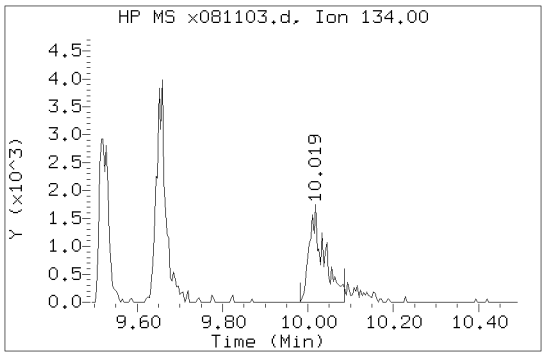
AFTER
MASS
92
AREA
7722
HEIGHT
2870
12-Aug-2023
22:44



BEFORE
MASS
134
AREA
4266
HEIGHT
1745
12-Aug-2023
22:44



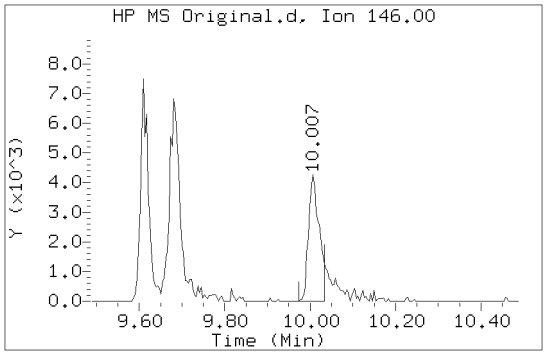
AFTER
MASS
134
AREA
4266
HEIGHT
1745
12-Aug-2023
22:44



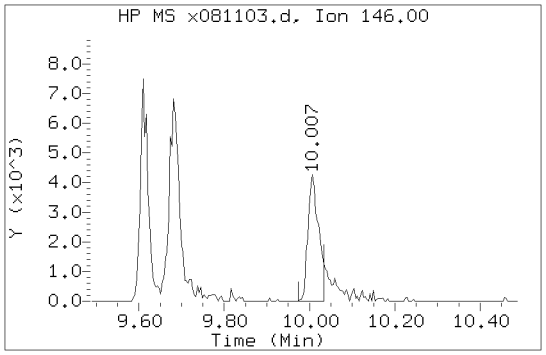
1,2-Dichlorobenzene (95-50-1)

Reason Code:

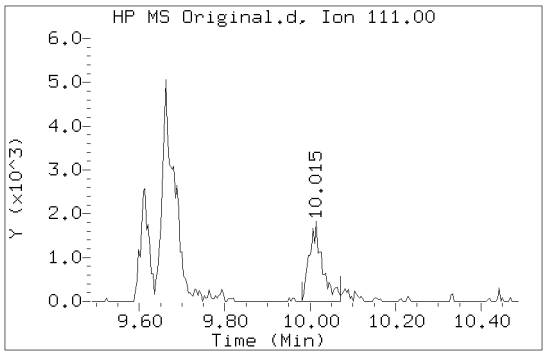
BEFORE
MASS
146
AREA
7410
HEIGHT
4267
12-Aug-2023
22:44



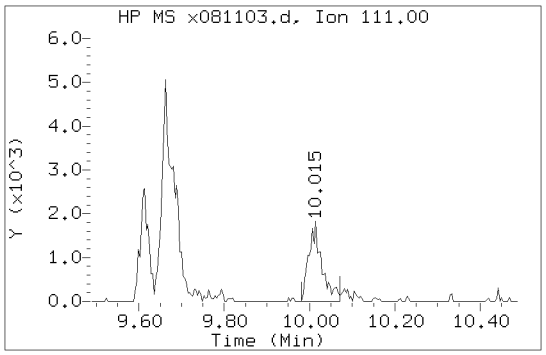
AFTER
MASS
146
AREA
7410
HEIGHT
4267
12-Aug-2023
22:44



BEFORE
MASS
111
AREA
3878
HEIGHT
1827
12-Aug-2023
22:44



AFTER
MASS
111
AREA
3878
HEIGHT
1827
12-Aug-2023
22:44



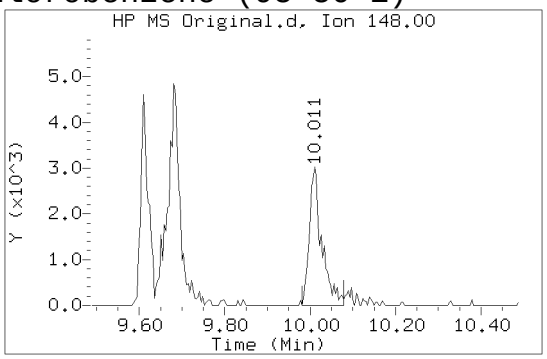
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InstruID : voa6.i
LabSampID : VSTD000.5

1,2-Dichlorobenzene (95-50-1)

Reason Code:

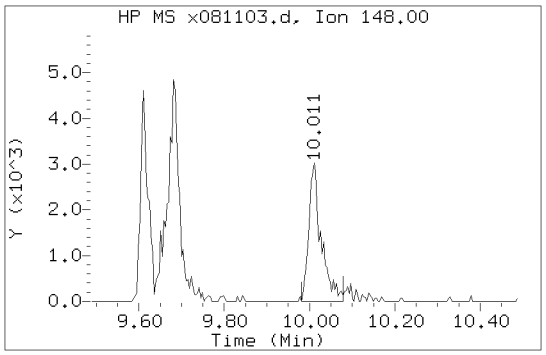
BEFORE

MASS
148
AREA
6094
HEIGHT
3030
12-Aug-2023
22:44



AFTER

MASS
148
AREA
6094
HEIGHT
3030
12-Aug-2023
22:44

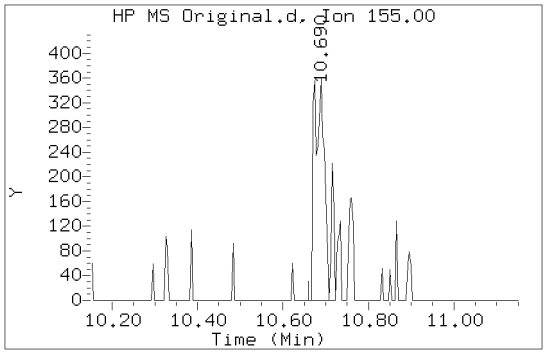


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

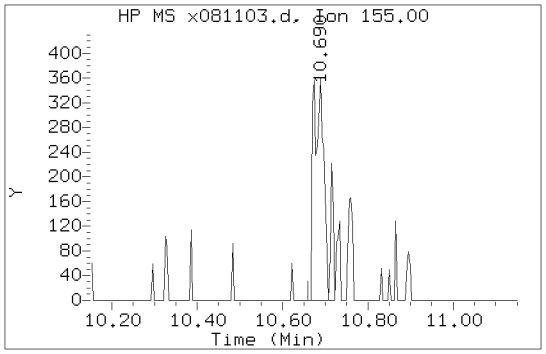
BEFORE

MASS
155
AREA
676
HEIGHT
359
12-Aug-2023
22:44



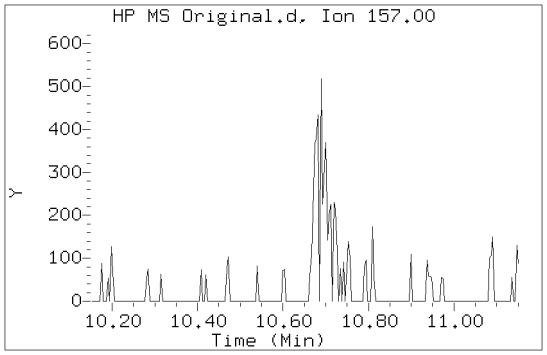
AFTER

MASS
155
AREA
676
HEIGHT
359
12-Aug-2023
22:44



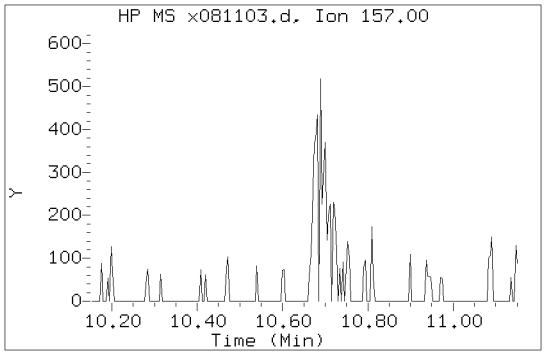
BEFORE

MASS
157
AREA
0
HEIGHT
0
12-Aug-2023
22:44



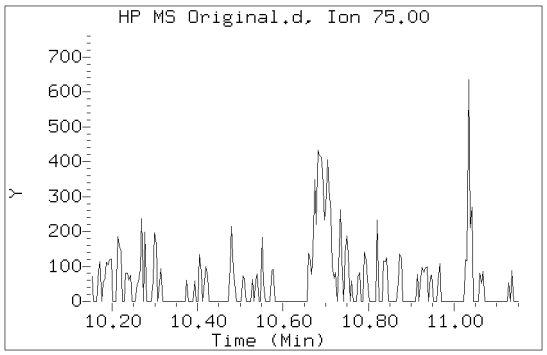
AFTER

MASS
157
AREA
0
HEIGHT
0
12-Aug-2023
22:44



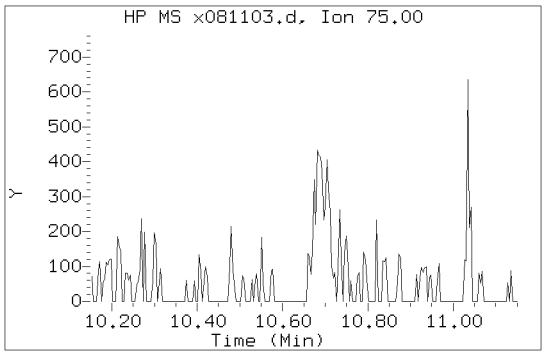
BEFORE

MASS
75
AREA
0
HEIGHT
0
12-Aug-2023
22:44



AFTER

MASS
75
AREA
0
HEIGHT
0
12-Aug-2023
22:44

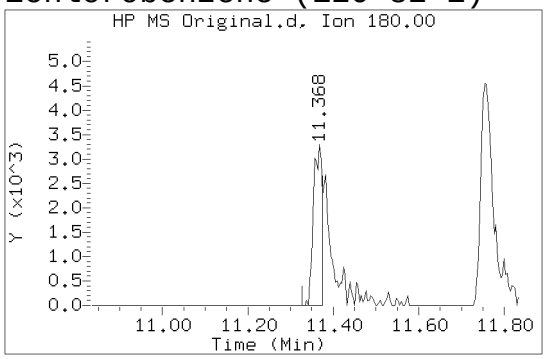


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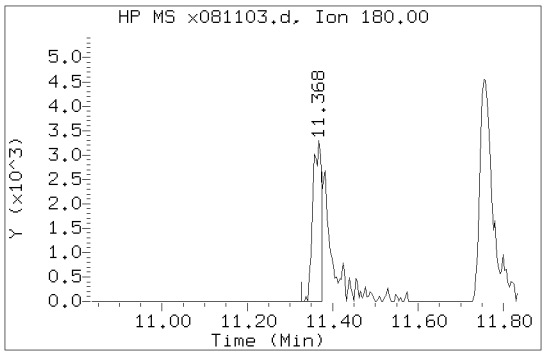
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

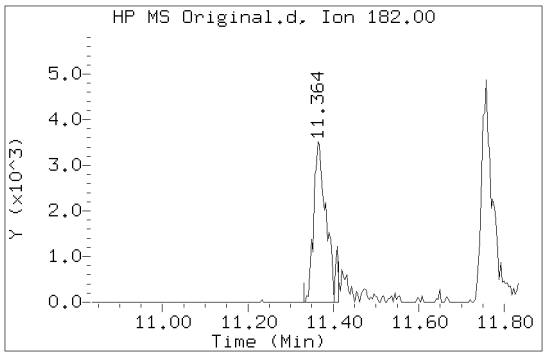
BEFORE
MASS
180
AREA
4663
HEIGHT
3304
12-Aug-2023
22:44



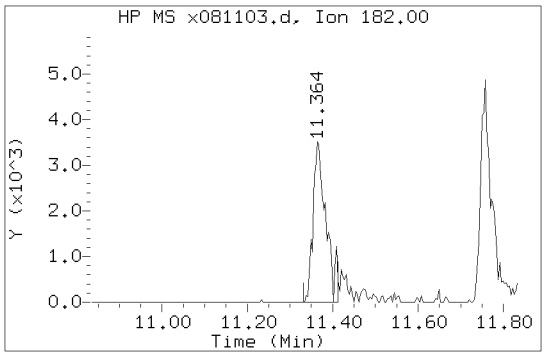
AFTER
MASS
180
AREA
4663
HEIGHT
3304
12-Aug-2023
22:44



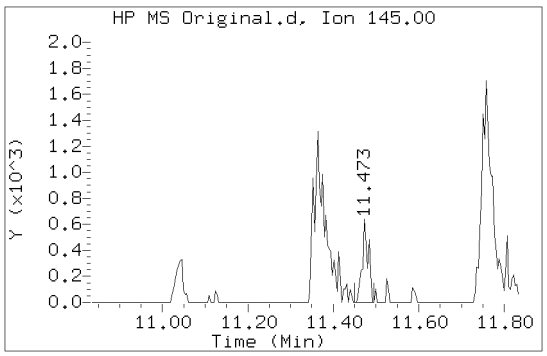
BEFORE
MASS
182
AREA
7442
HEIGHT
3523
12-Aug-2023
22:44



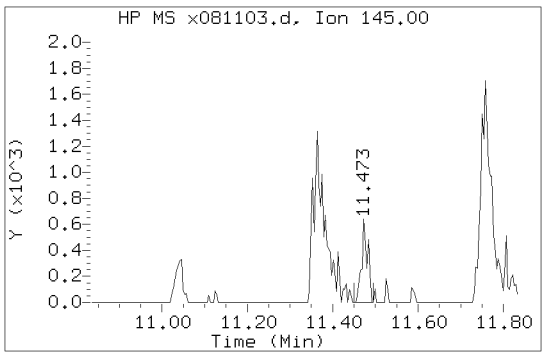
AFTER
MASS
182
AREA
7442
HEIGHT
3523
12-Aug-2023
22:44



BEFORE
MASS
145
AREA
624
HEIGHT
639
12-Aug-2023
22:44



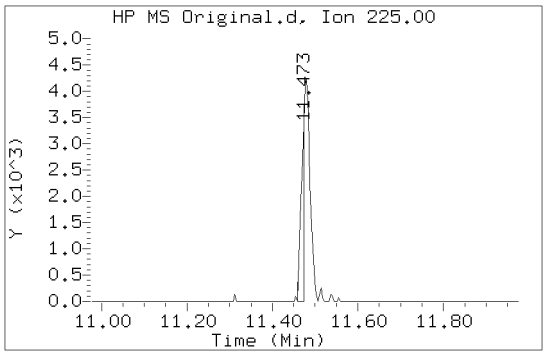
AFTER
MASS
145
AREA
624
HEIGHT
639
12-Aug-2023
22:44



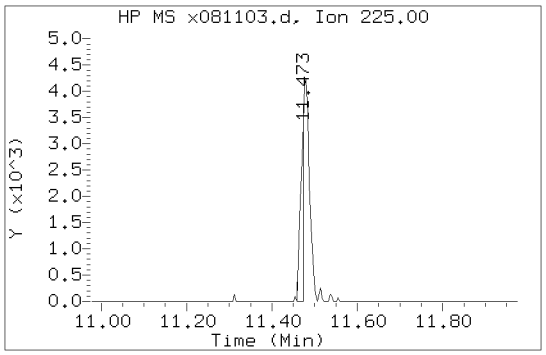
Hexachlorobutadiene (87-68-3)

Reason Code:

BEFORE
MASS
225
AREA
1914
HEIGHT
3388
12-Aug-2023
22:44



AFTER
MASS
225
AREA
1914
HEIGHT
3388
12-Aug-2023
22:44

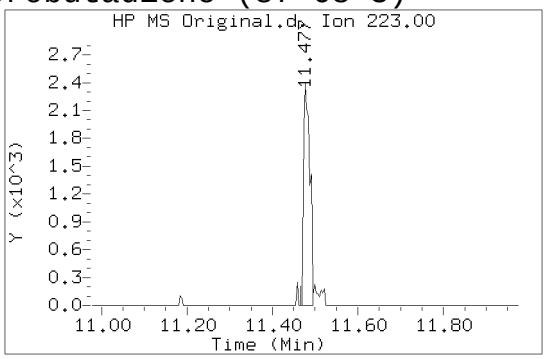


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LabSampID : VSTD000.5

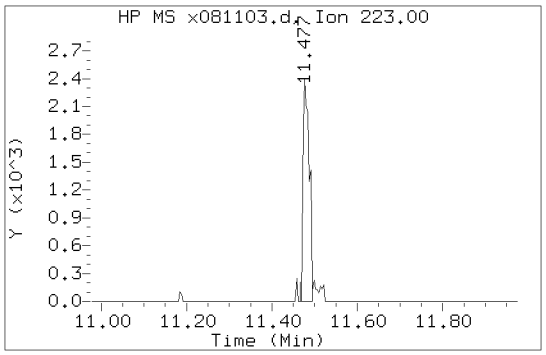
Hexachlorobutadiene (87-68-3)

Reason Code:

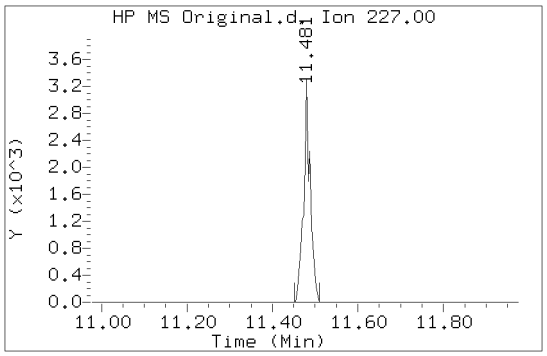
BEFORE
MASS
223
AREA
2534
HEIGHT
2389
12-Aug-2023
22:44



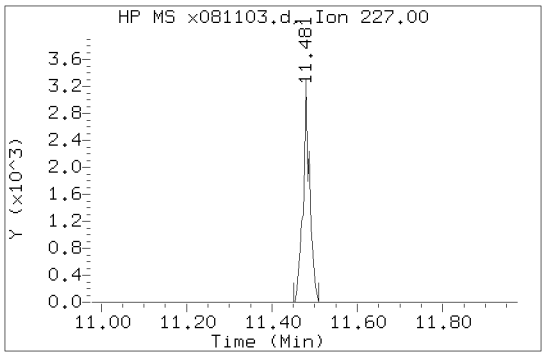
AFTER
MASS
223
AREA
2534
HEIGHT
2389
12-Aug-2023
22:44



BEFORE
MASS
227
AREA
3607
HEIGHT
3296
12-Aug-2023
22:44



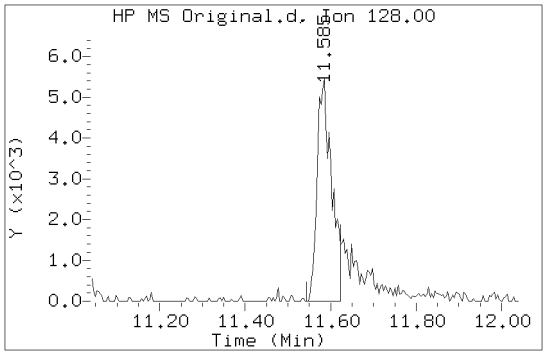
AFTER
MASS
227
AREA
3607
HEIGHT
3296
12-Aug-2023
22:44



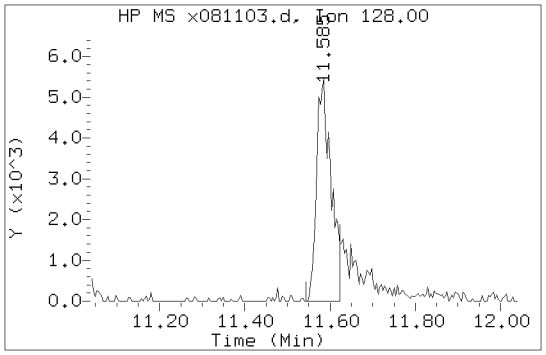
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
128
AREA
12804
HEIGHT
5450
12-Aug-2023
22:44



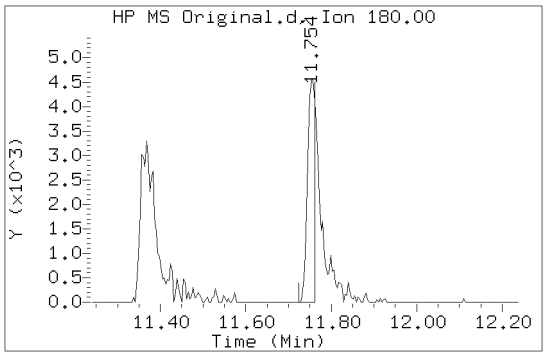
AFTER
MASS
128
AREA
12804
HEIGHT
5450
12-Aug-2023
22:44



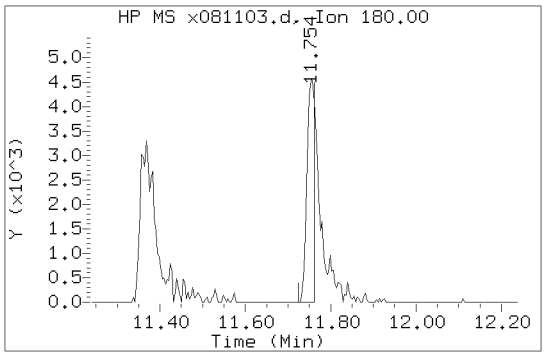
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
180
AREA
5452
HEIGHT
4544
12-Aug-2023
22:44



AFTER
MASS
180
AREA
5452
HEIGHT
4544
12-Aug-2023
22:44

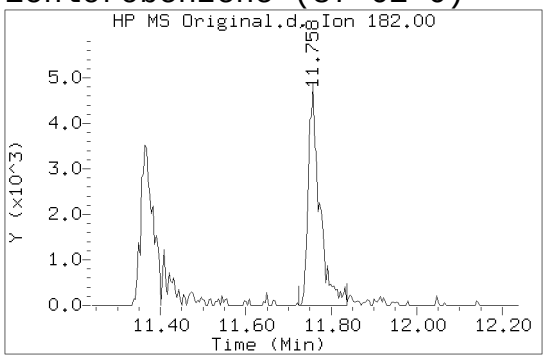


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InstruID : voa6.i
LabSampID : VSTD000.5

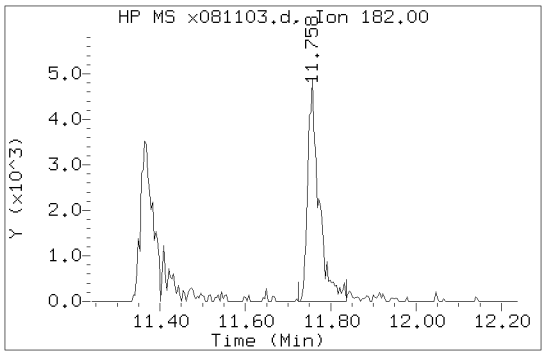
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

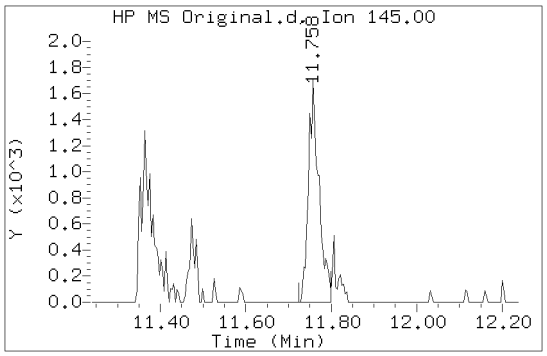
BEFORE
MASS
182
AREA
8964
HEIGHT
4871
12-Aug-2023
22:44



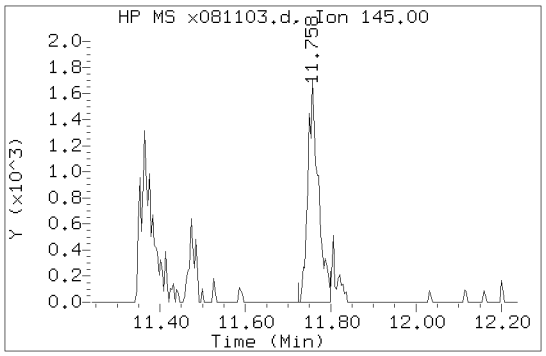
AFTER
MASS
182
AREA
8964
HEIGHT
4871
12-Aug-2023
22:44



BEFORE
MASS
145
AREA
2897
HEIGHT
1705
12-Aug-2023
22:44



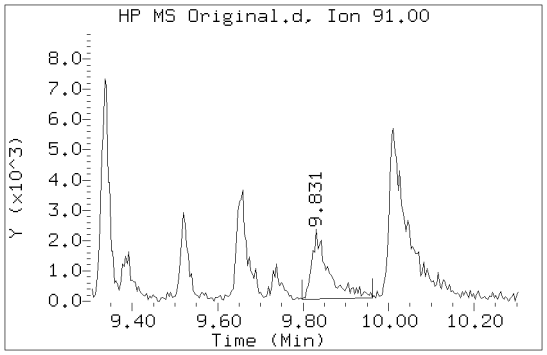
AFTER
MASS
145
AREA
2897
HEIGHT
1705
12-Aug-2023
22:44



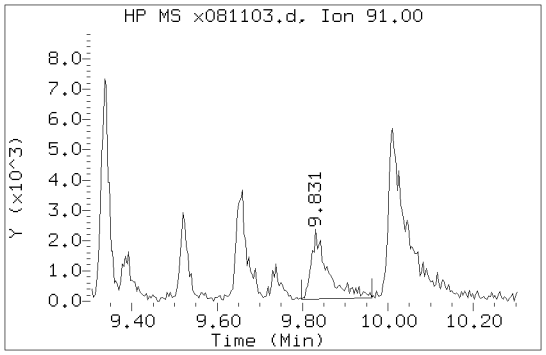
Benzyl Chloride (100-44-7)

Reason Code:

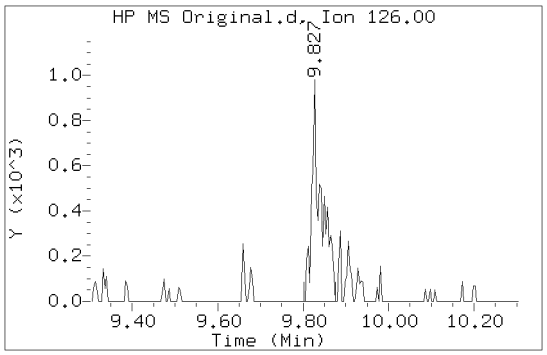
BEFORE
MASS
91
AREA
6104
HEIGHT
2311
12-Aug-2023
22:44



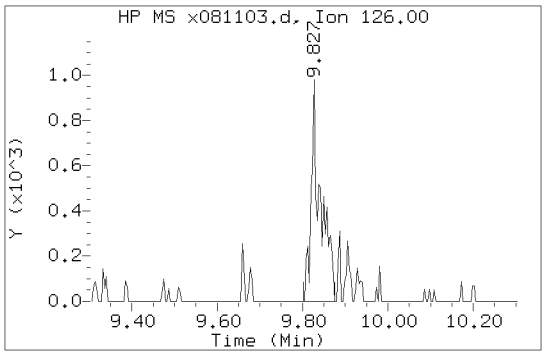
AFTER
MASS
91
AREA
6104
HEIGHT
2311
12-Aug-2023
22:44



BEFORE
MASS
126
AREA
1512
HEIGHT
981
12-Aug-2023
22:44



AFTER
MASS
126
AREA
1512
HEIGHT
981
12-Aug-2023
22:44



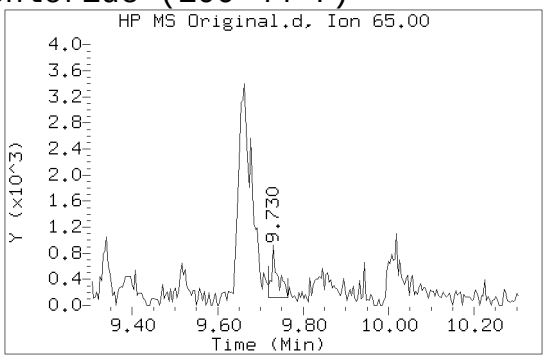
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

Benzyl Chloride (100-44-7)

Reason Code:

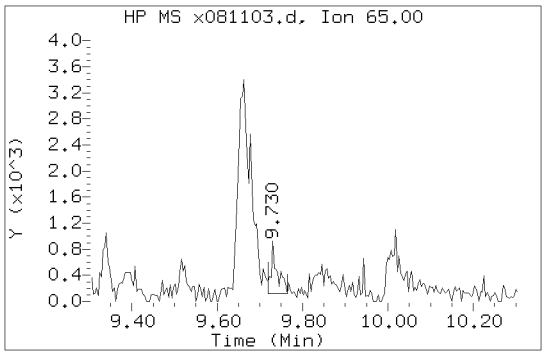
BEFORE

MASS
65
AREA
828
HEIGHT
804
12-Aug-2023
22:44



AFTER

MASS
65
AREA
828
HEIGHT
804
12-Aug-2023
22:44

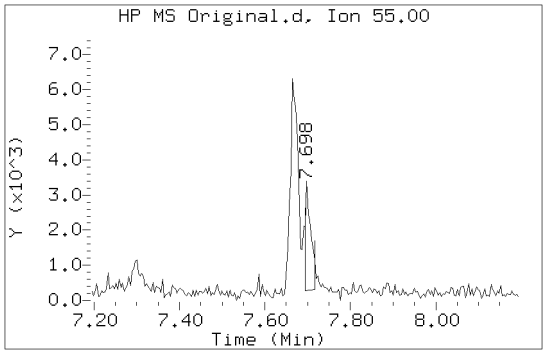


1-Chlorohexane (544-10-5)

Reason Code:

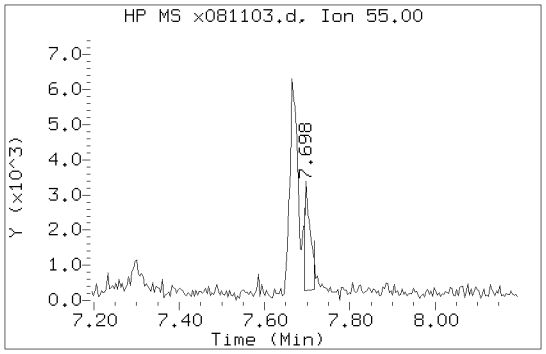
BEFORE

MASS
55
AREA
2827
HEIGHT
3106
12-Aug-2023
22:44



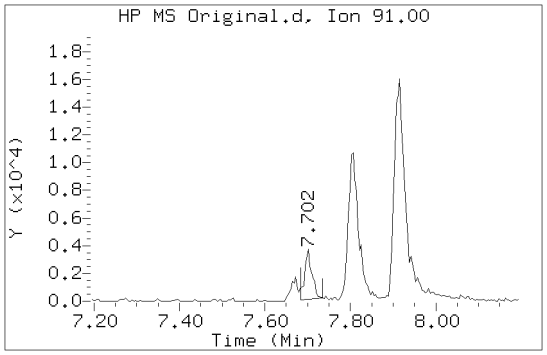
AFTER

MASS
55
AREA
2827
HEIGHT
3106
12-Aug-2023
22:44



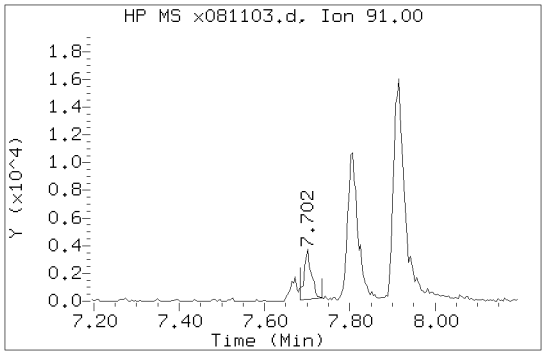
BEFORE

MASS
91
AREA
4425
HEIGHT
3645
12-Aug-2023
22:44



AFTER

MASS
91
AREA
4425
HEIGHT
3645
12-Aug-2023
22:44

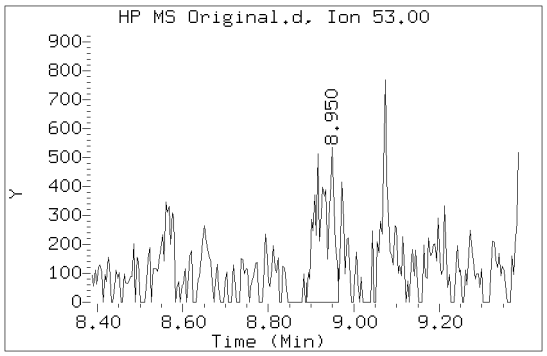


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

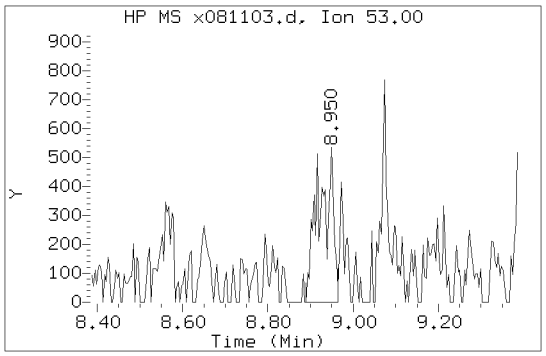
BEFORE

MASS
53
AREA
1260
HEIGHT
536
12-Aug-2023
22:44



AFTER

MASS
53
AREA
1260
HEIGHT
536
12-Aug-2023
22:44



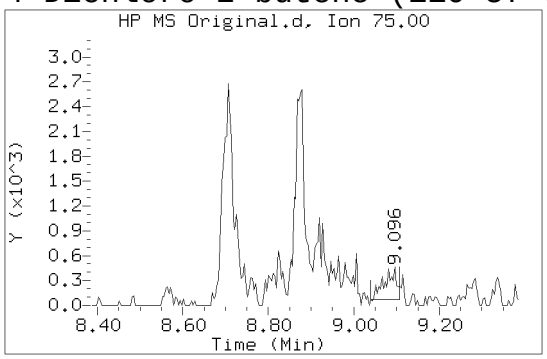
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

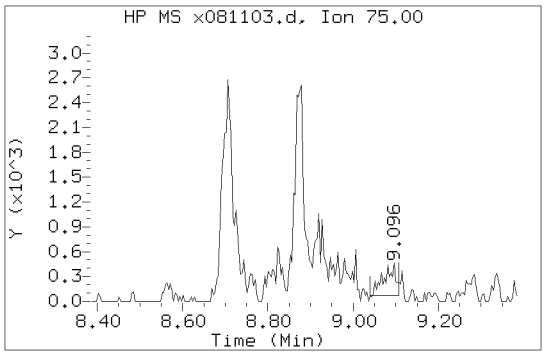
BEFORE

MASS
75
AREA
745
HEIGHT
396
12-Aug-2023
22:44



AFTER

MASS
75
AREA
745
HEIGHT
396
12-Aug-2023
22:44

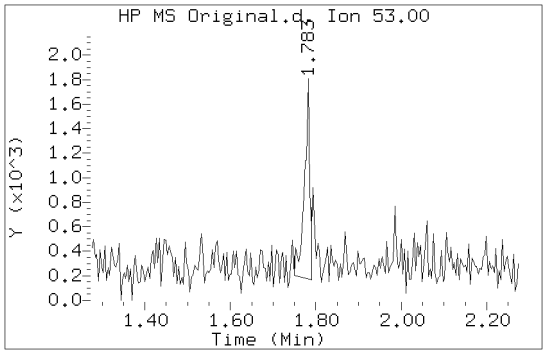


Chloroprene (126-99-8)

Reason Code:

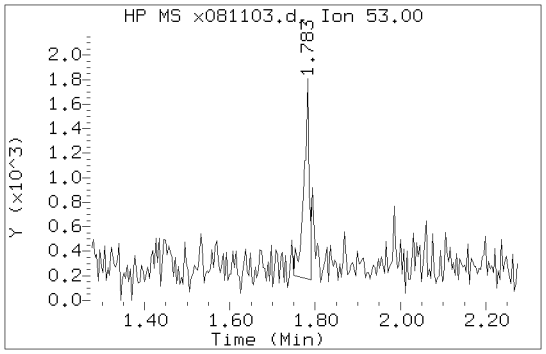
BEFORE

MASS
53
AREA
1459
HEIGHT
1634
12-Aug-2023
22:44



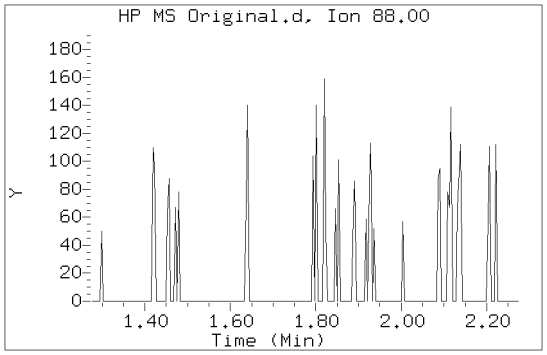
AFTER

MASS
53
AREA
1459
HEIGHT
1634
12-Aug-2023
22:44



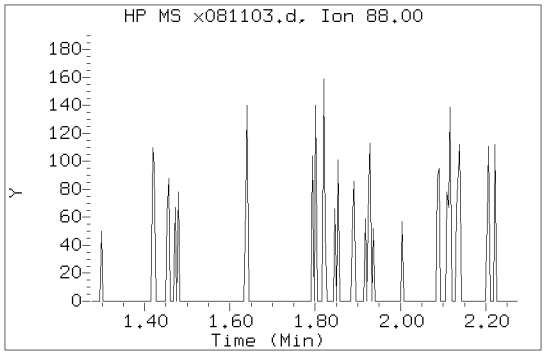
BEFORE

MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:44



AFTER

MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:44

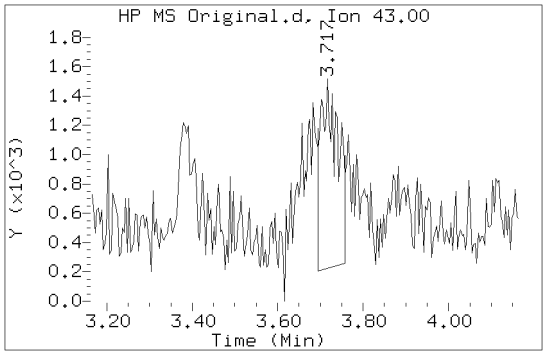


Ethyl Acetate (141-78-6)

Reason Code:

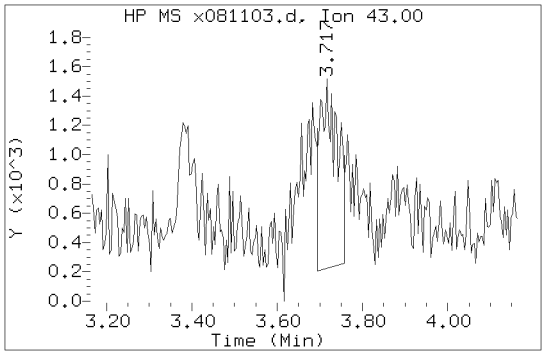
BEFORE

MASS
43
AREA
3740
HEIGHT
1290
12-Aug-2023
22:44



AFTER

MASS
43
AREA
3740
HEIGHT
1290
12-Aug-2023
22:44

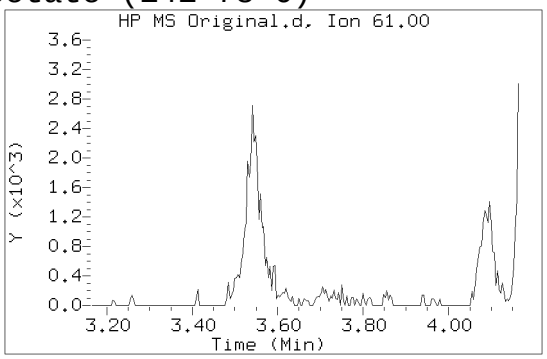


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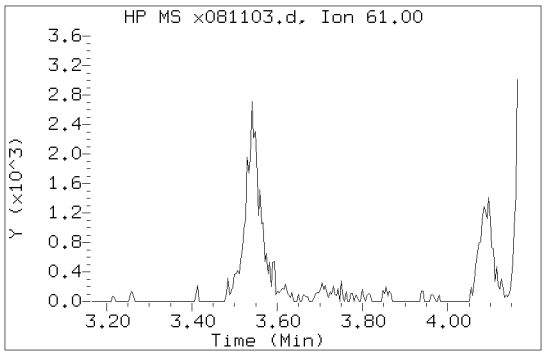
Ethyl Acetate (141-78-6)

Reason Code:

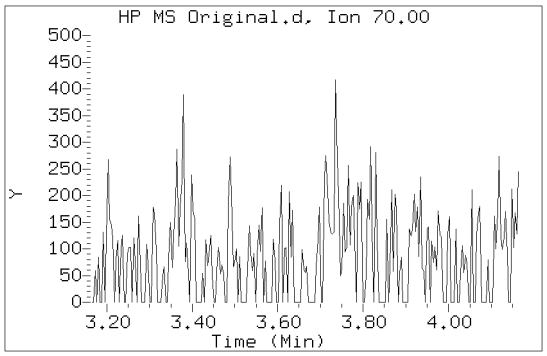
BEFORE
MASS
61
AREA
0
HEIGHT
0
12-Aug-2023
22:44



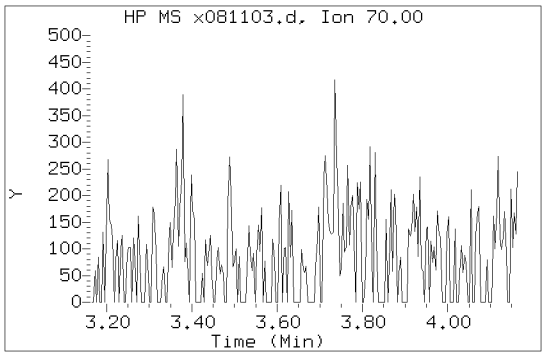
AFTER
MASS
61
AREA
0
HEIGHT
0
12-Aug-2023
22:44



BEFORE
MASS
70
AREA
0
HEIGHT
0
12-Aug-2023
22:44



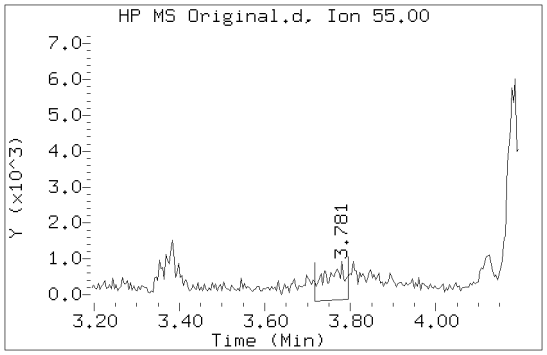
AFTER
MASS
70
AREA
0
HEIGHT
0
12-Aug-2023
22:44



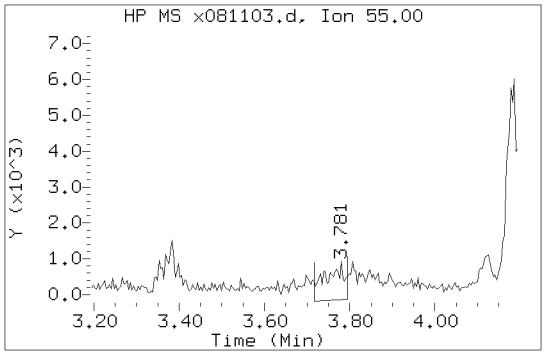
Methyl Acrylate (96-33-3)

Reason Code:

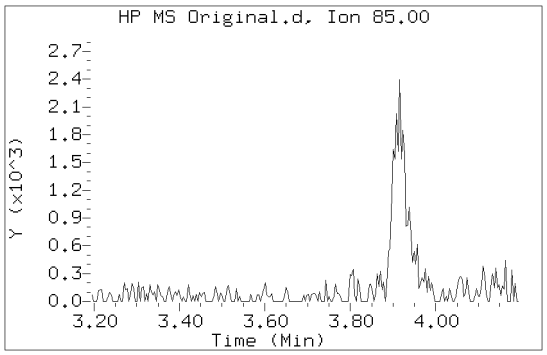
BEFORE
MASS
55
AREA
3259
HEIGHT
1070
12-Aug-2023
22:44



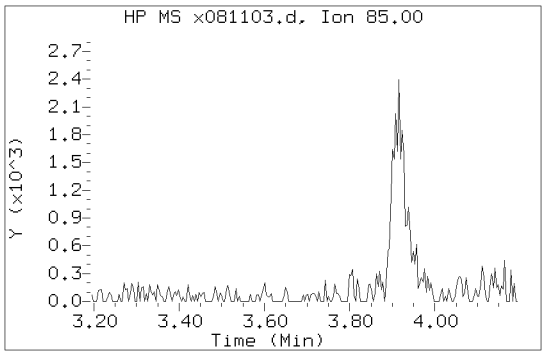
AFTER
MASS
55
AREA
3259
HEIGHT
1070
12-Aug-2023
22:44



BEFORE
MASS
85
AREA
0
HEIGHT
0
12-Aug-2023
22:44



AFTER
MASS
85
AREA
0
HEIGHT
0
12-Aug-2023
22:44

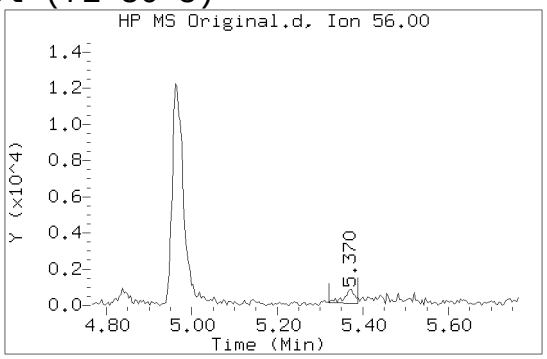


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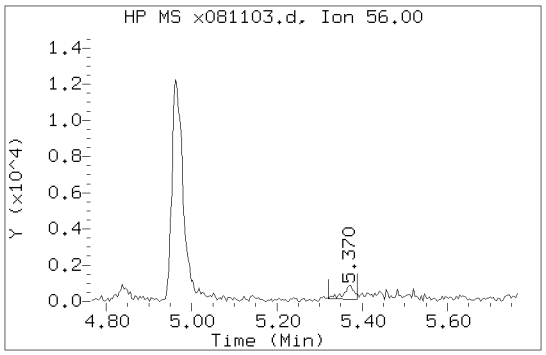
n-Butanol (71-36-3)

Reason Code:

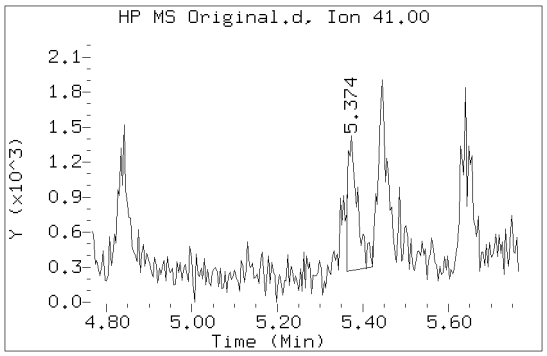
BEFORE
MASS
56
AREA
1373
HEIGHT
760
12-Aug-2023
22:44



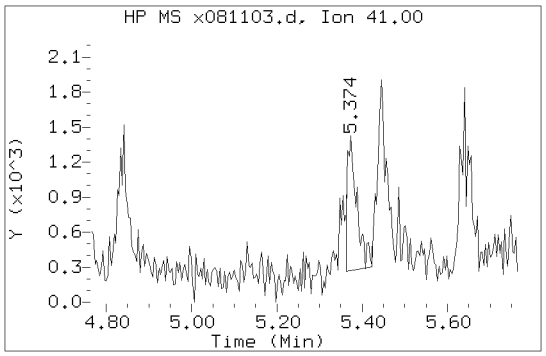
AFTER
MASS
56
AREA
1373
HEIGHT
760
12-Aug-2023
22:44



BEFORE
MASS
41
AREA
1816
HEIGHT
1155
12-Aug-2023
22:44



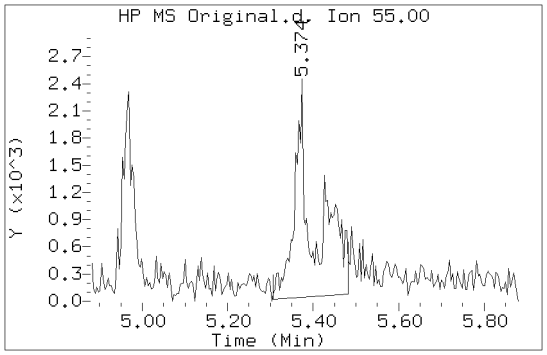
AFTER
MASS
41
AREA
1816
HEIGHT
1155
12-Aug-2023
22:44



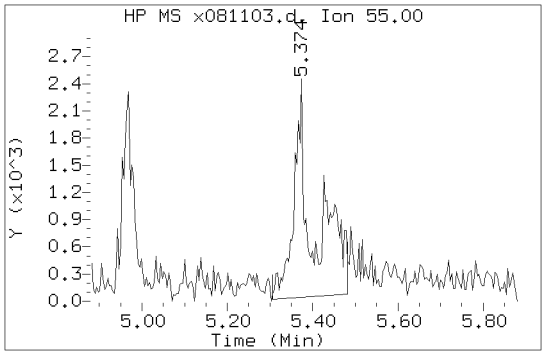
Ethyl Acrylate (140-88-5)

Reason Code:

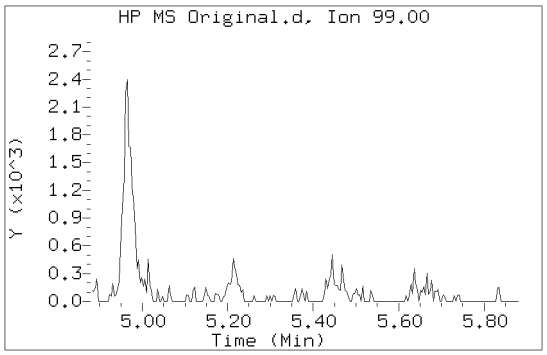
BEFORE
MASS
55
AREA
7657
HEIGHT
2409
12-Aug-2023
22:44



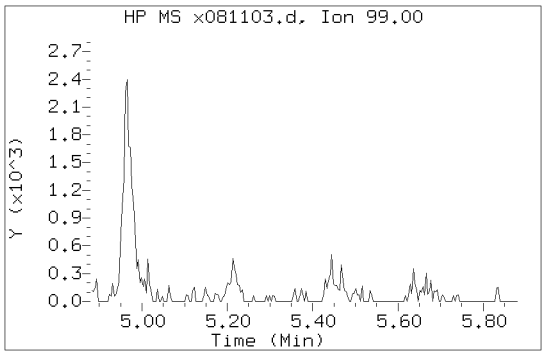
AFTER
MASS
55
AREA
7657
HEIGHT
2409
12-Aug-2023
22:44



BEFORE
MASS
99
AREA
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HEIGHT
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12-Aug-2023
22:44



AFTER
MASS
99
AREA
0
HEIGHT
0
12-Aug-2023
22:44

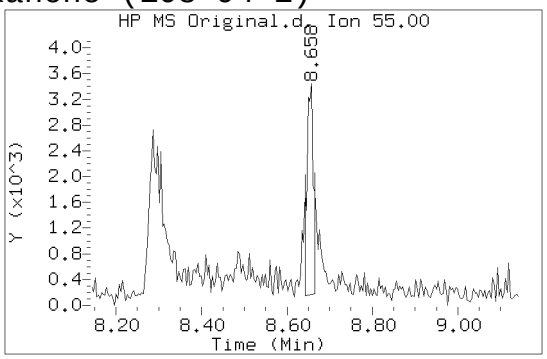


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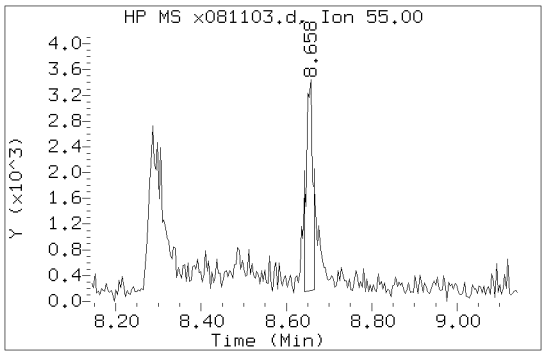
Cyclohexanone (108-94-1)

Reason Code:

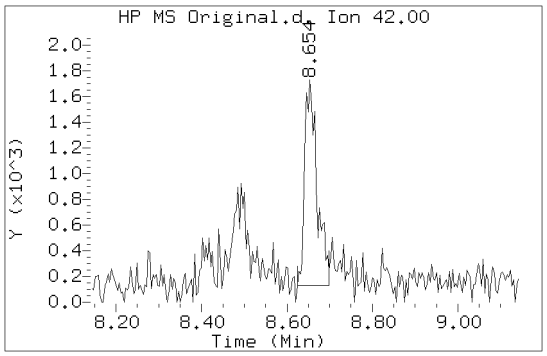
BEFORE
MASS
55
AREA
3494
HEIGHT
3275
12-Aug-2023
22:44



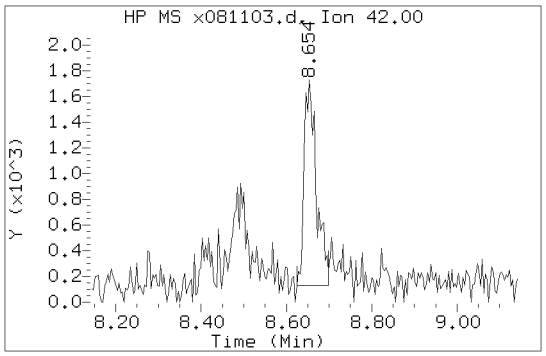
AFTER
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55
AREA
3494
HEIGHT
3275
12-Aug-2023
22:44



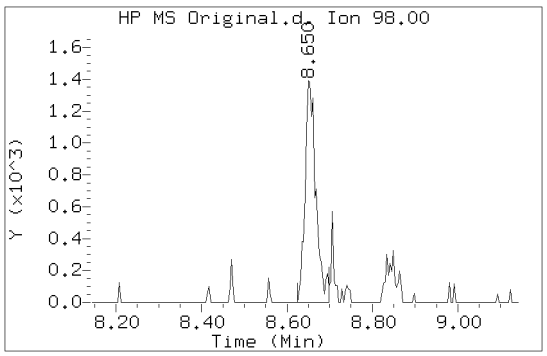
BEFORE
MASS
42
AREA
3200
HEIGHT
1599
12-Aug-2023
22:44



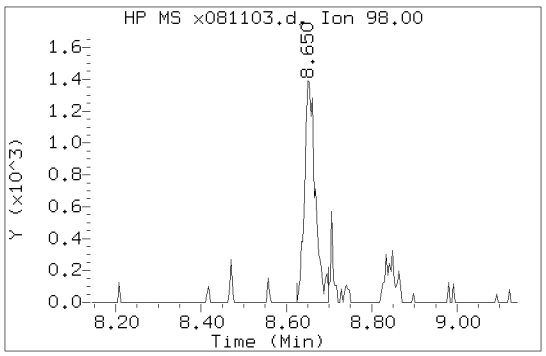
AFTER
MASS
42
AREA
3200
HEIGHT
1599
12-Aug-2023
22:44



BEFORE
MASS
98
AREA
2463
HEIGHT
1391
12-Aug-2023
22:44



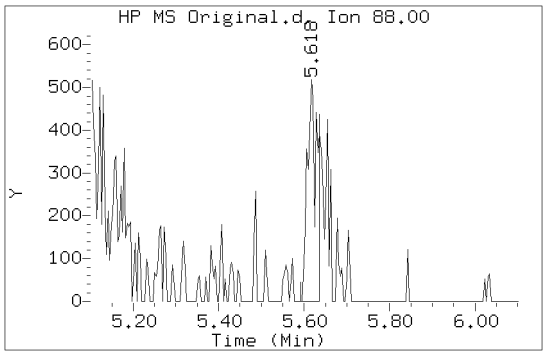
AFTER
MASS
98
AREA
2463
HEIGHT
1391
12-Aug-2023
22:44



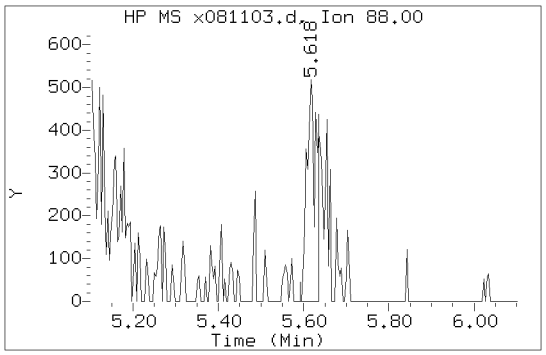
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
825
HEIGHT
518
12-Aug-2023
22:44



AFTER
MASS
88
AREA
825
HEIGHT
518
12-Aug-2023
22:44

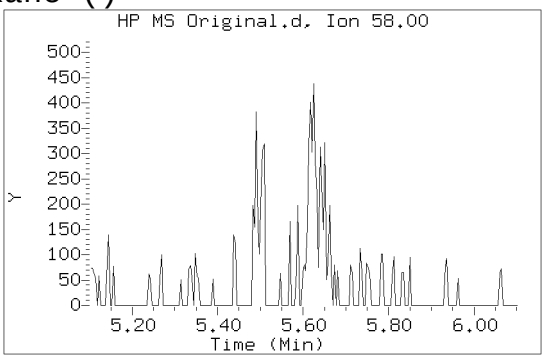


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

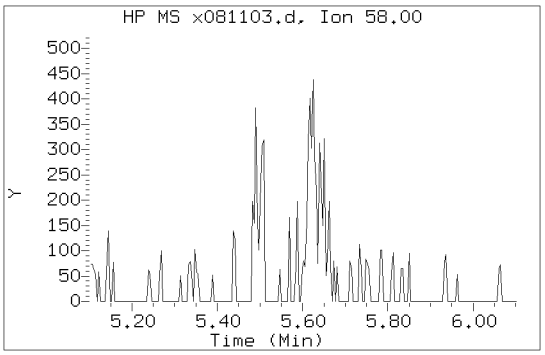
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
58
AREA
0
HEIGHT
0
12-Aug-2023
22:44



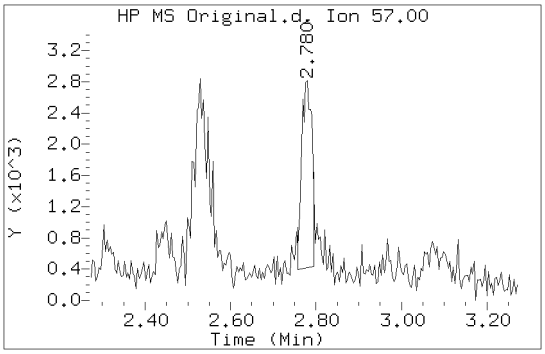
AFTER
MASS
58
AREA
0
HEIGHT
0
12-Aug-2023
22:44



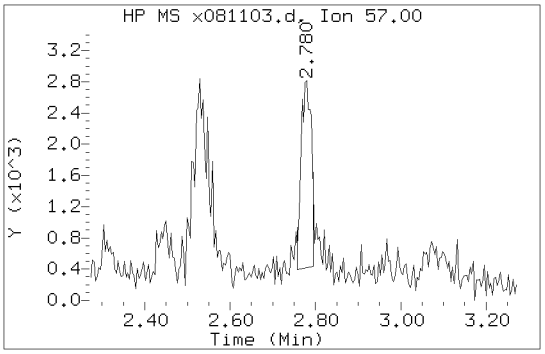
n-Hexane (110-54-3)

Reason Code:

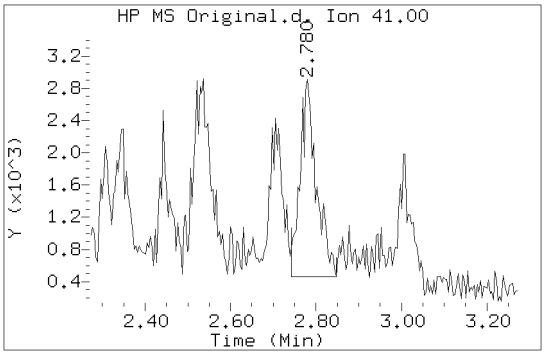
BEFORE
MASS
57
AREA
4056
HEIGHT
2392
12-Aug-2023
22:44



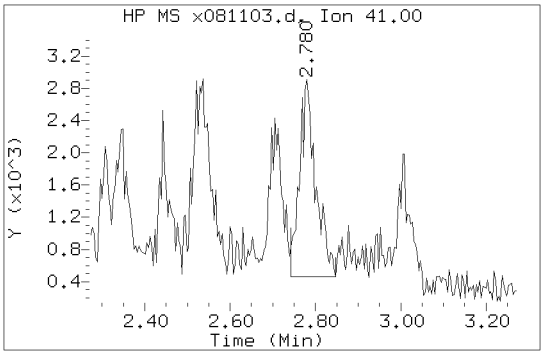
AFTER
MASS
57
AREA
4056
HEIGHT
2392
12-Aug-2023
22:44



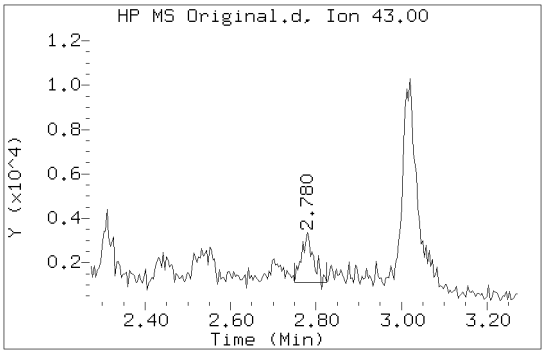
BEFORE
MASS
41
AREA
6537
HEIGHT
2450
12-Aug-2023
22:44



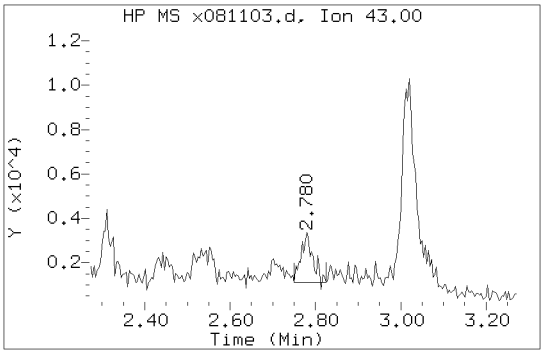
AFTER
MASS
41
AREA
6537
HEIGHT
2450
12-Aug-2023
22:44



BEFORE
MASS
43
AREA
4290
HEIGHT
2253
12-Aug-2023
22:44



AFTER
MASS
43
AREA
4290
HEIGHT
2253
12-Aug-2023
22:44

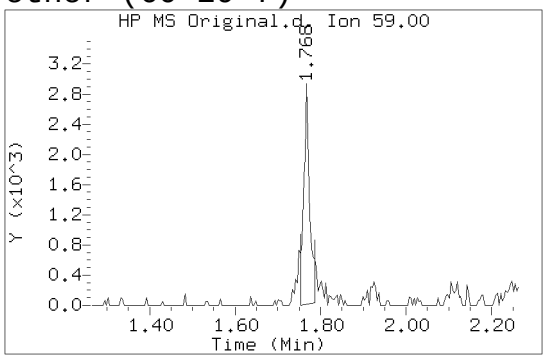


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InstruID : voa6.i
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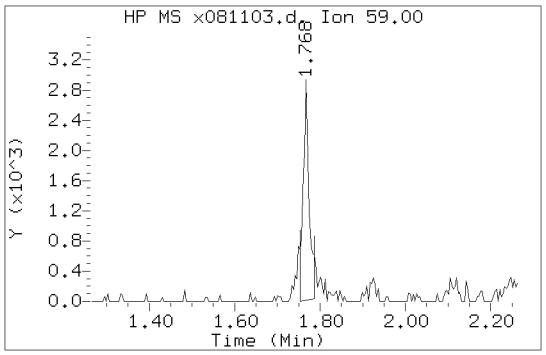
Diethyl ether (60-29-7)

Reason Code:

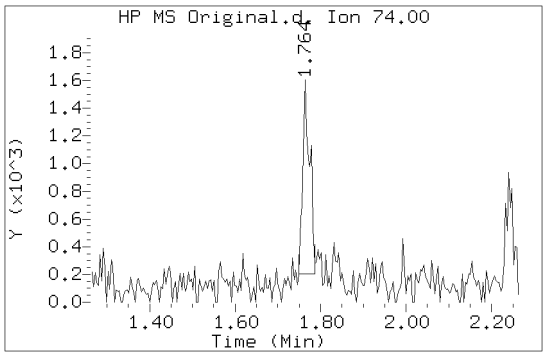
BEFORE
MASS
59
AREA
2930
HEIGHT
2922
12-Aug-2023
22:44



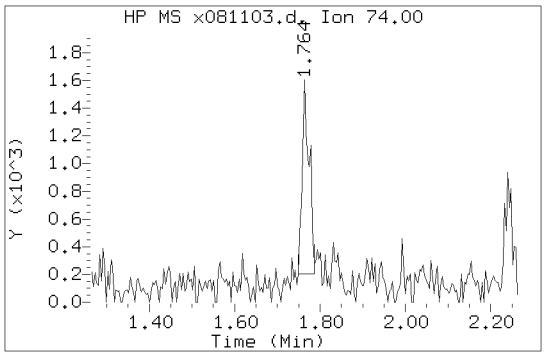
AFTER
MASS
59
AREA
2930
HEIGHT
2922
12-Aug-2023
22:44



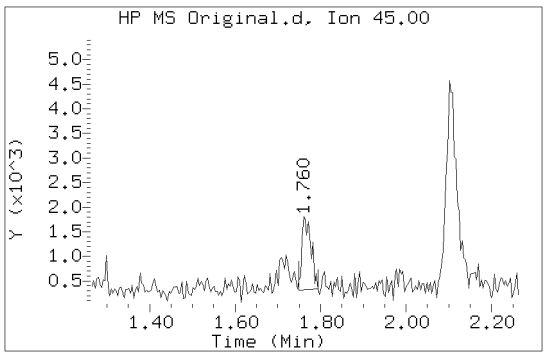
BEFORE
MASS
74
AREA
1653
HEIGHT
1402
12-Aug-2023
22:44



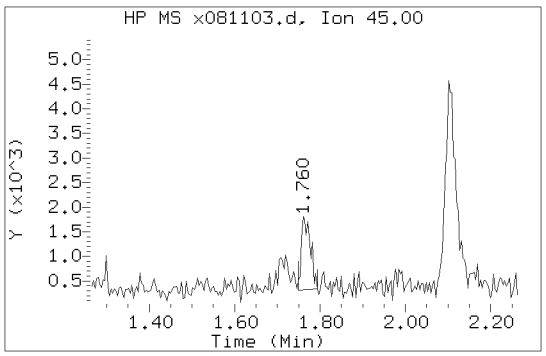
AFTER
MASS
74
AREA
1653
HEIGHT
1402
12-Aug-2023
22:44



BEFORE
MASS
45
AREA
2242
HEIGHT
1486
12-Aug-2023
22:44



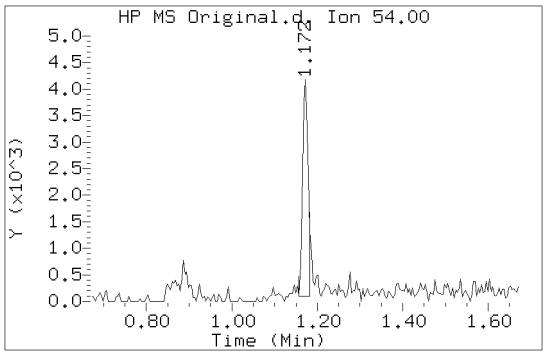
AFTER
MASS
45
AREA
2242
HEIGHT
1486
12-Aug-2023
22:44



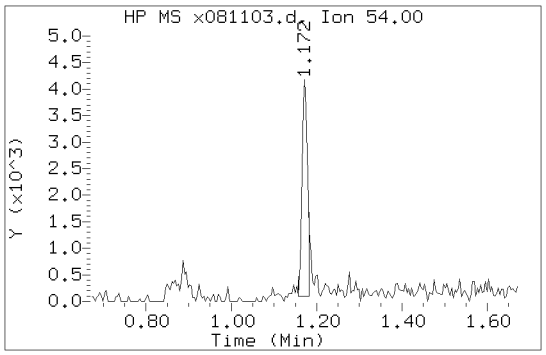
1,3-Butadiene (106-99-0)

Reason Code:

BEFORE
MASS
54
AREA
3838
HEIGHT
4080
12-Aug-2023
22:44



AFTER
MASS
54
AREA
3838
HEIGHT
4080
12-Aug-2023
22:44



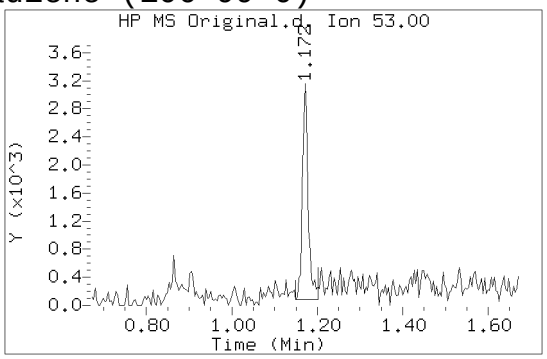
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

1,3-Butadiene (106-99-0)

Reason Code:

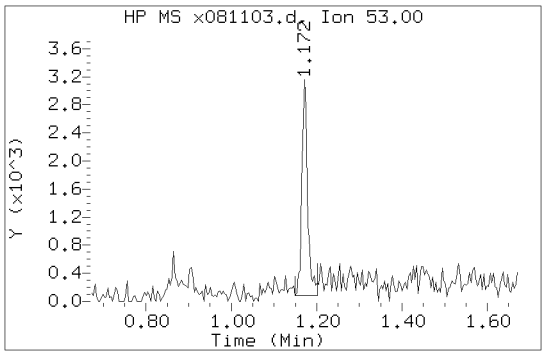
BEFORE

MASS
53
AREA
3036
HEIGHT
3077
12-Aug-2023
22:44



AFTER

MASS
53
AREA
3036
HEIGHT
3077
12-Aug-2023
22:44

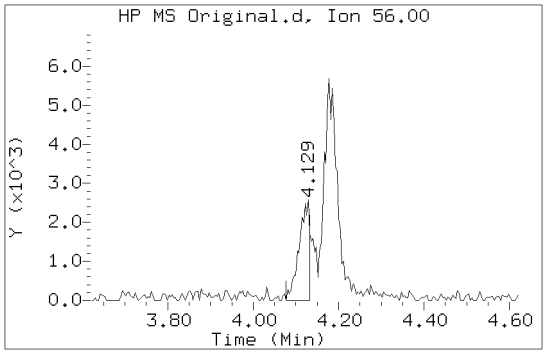


Cyclohexane (110-82-7)

Reason Code:

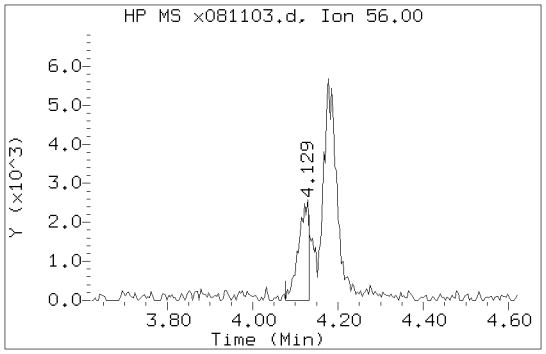
BEFORE

MASS
56
AREA
4440
HEIGHT
2580
12-Aug-2023
22:44



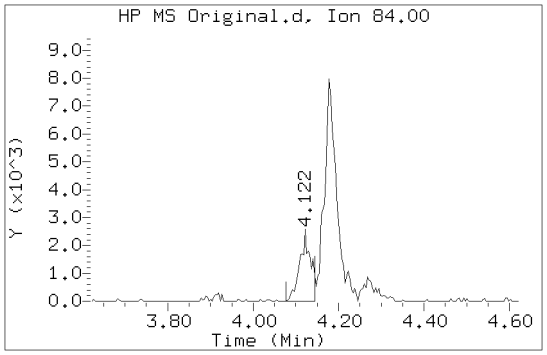
AFTER

MASS
56
AREA
4440
HEIGHT
2580
12-Aug-2023
22:44



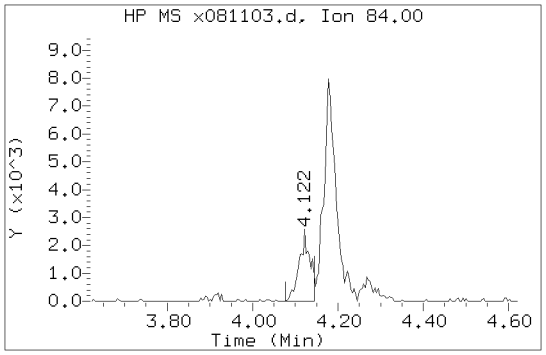
BEFORE

MASS
84
AREA
4567
HEIGHT
2590
12-Aug-2023
22:44



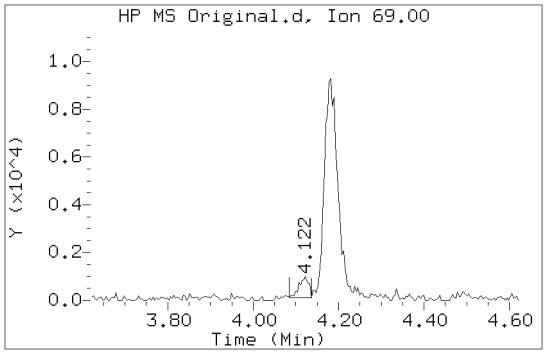
AFTER

MASS
84
AREA
4567
HEIGHT
2590
12-Aug-2023
22:44



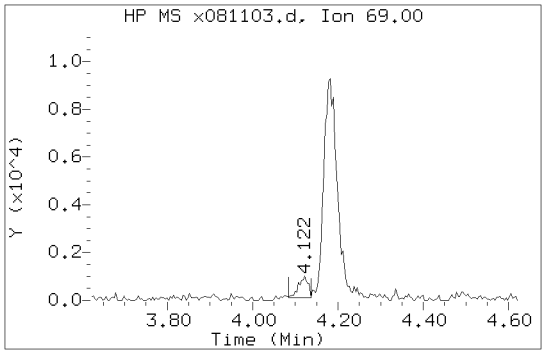
BEFORE

MASS
69
AREA
1420
HEIGHT
919
12-Aug-2023
22:44



AFTER

MASS
69
AREA
1420
HEIGHT
919
12-Aug-2023
22:44

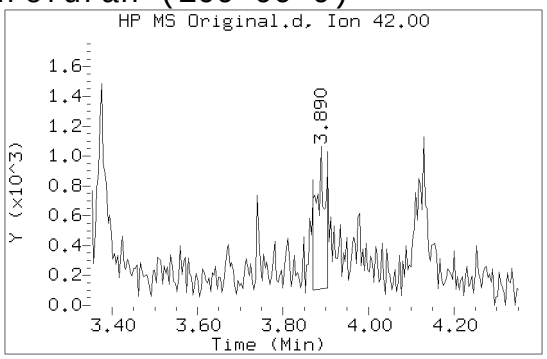


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InstruID : voa6.i
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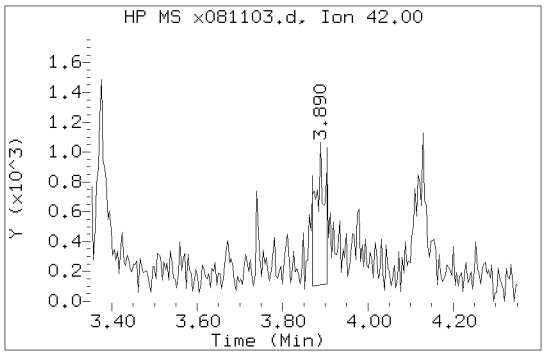
Tetrahydrofuran (109-99-9)

Reason Code:

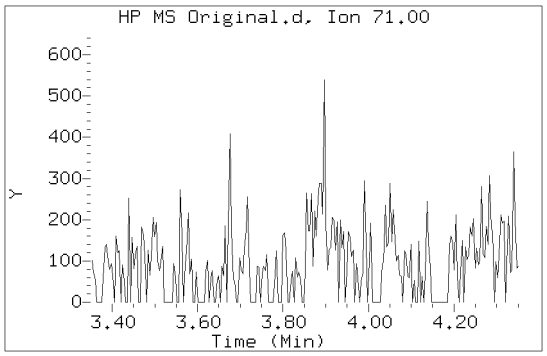
BEFORE
MASS
42
AREA
1419
HEIGHT
954
12-Aug-2023
22:44



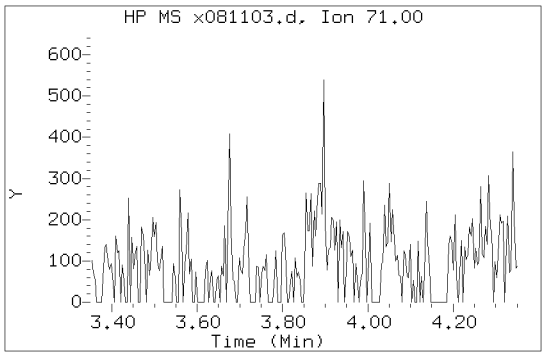
AFTER
MASS
42
AREA
1419
HEIGHT
954
12-Aug-2023
22:44



BEFORE
MASS
71
AREA
0
HEIGHT
0
12-Aug-2023
22:44



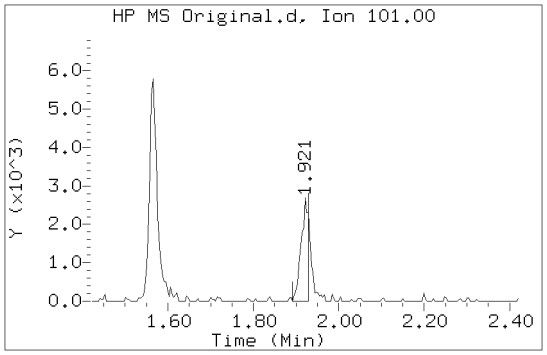
AFTER
MASS
71
AREA
0
HEIGHT
0
12-Aug-2023
22:44



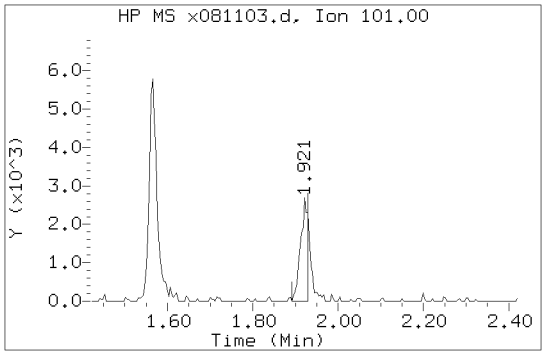
Freon TF (76-13-1)

Reason Code:

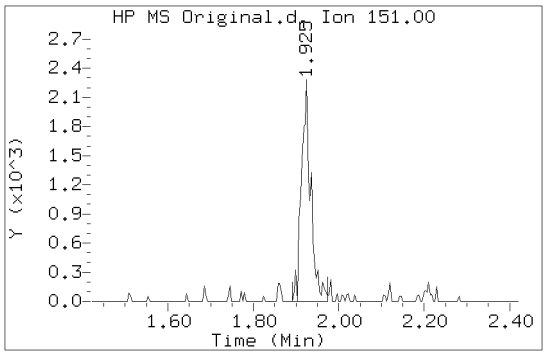
BEFORE
MASS
101
AREA
3204
HEIGHT
2695
12-Aug-2023
22:44



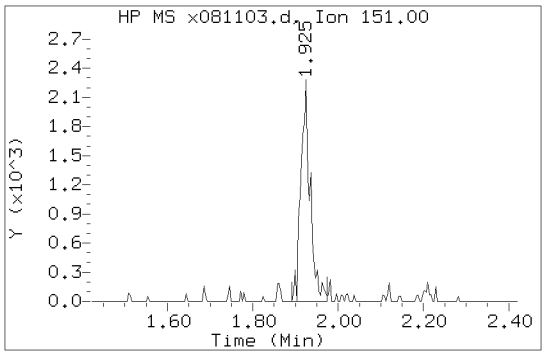
AFTER
MASS
101
AREA
3204
HEIGHT
2695
12-Aug-2023
22:44



BEFORE
MASS
151
AREA
3499
HEIGHT
2282
12-Aug-2023
22:44



AFTER
MASS
151
AREA
3499
HEIGHT
2282
12-Aug-2023
22:44

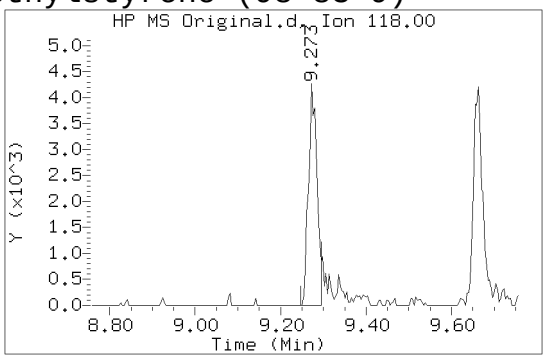


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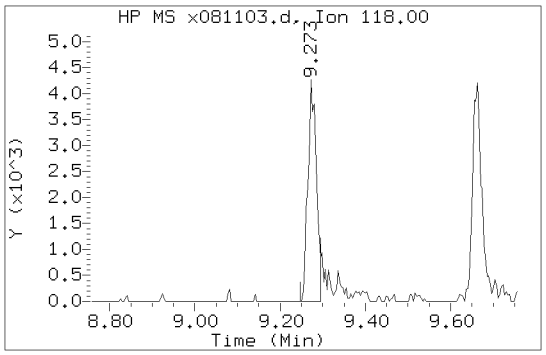
alpha-Methylstyrene (98-83-9)

Reason Code:

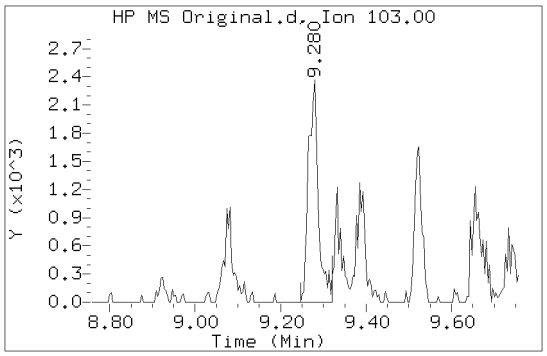
BEFORE
MASS
118
AREA
5954
HEIGHT
4268
12-Aug-2023
22:44



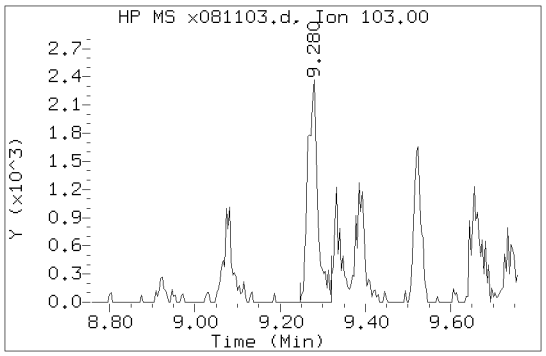
AFTER
MASS
118
AREA
5954
HEIGHT
4268
12-Aug-2023
22:44



BEFORE
MASS
103
AREA
3860
HEIGHT
2367
12-Aug-2023
22:44



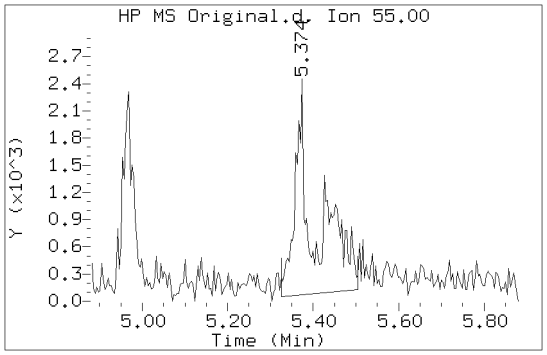
AFTER
MASS
103
AREA
3860
HEIGHT
2367
12-Aug-2023
22:44



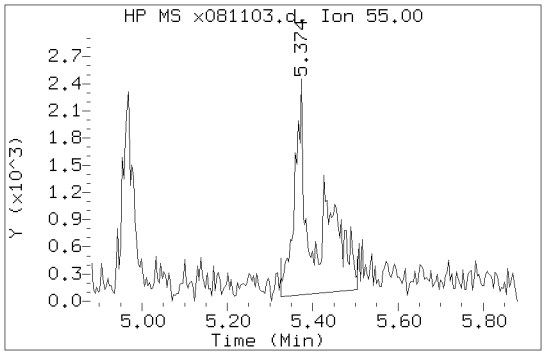
Methylcyclohexane (108-87-2)

Reason Code:

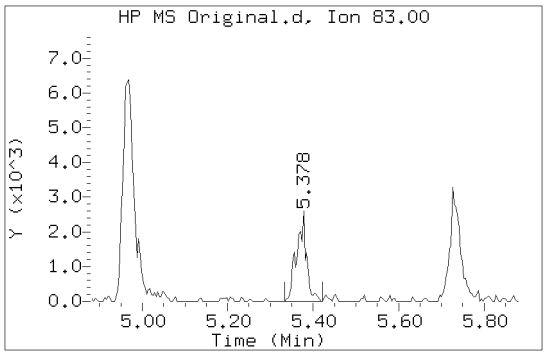
BEFORE
MASS
55
AREA
7626
HEIGHT
2381
12-Aug-2023
22:44



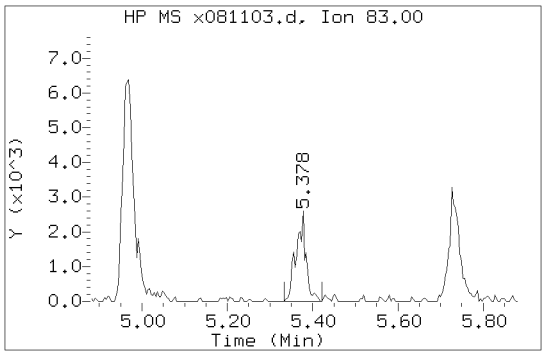
AFTER
MASS
55
AREA
7626
HEIGHT
2381
12-Aug-2023
22:44



BEFORE
MASS
83
AREA
4200
HEIGHT
2600
12-Aug-2023
22:44



AFTER
MASS
83
AREA
4200
HEIGHT
2600
12-Aug-2023
22:44

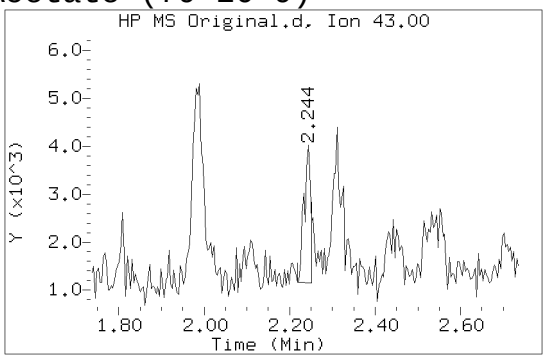


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LabSampID : VSTD000.5

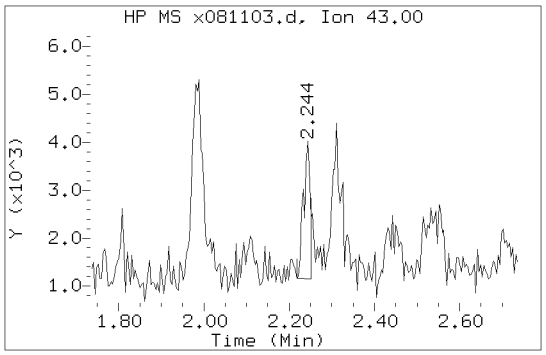
Methyl Acetate (79-20-9)

Reason Code:

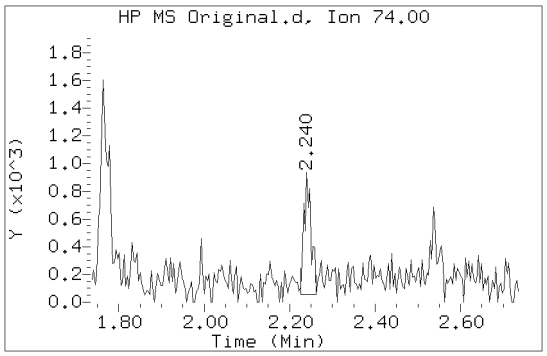
BEFORE
MASS
43
AREA
3113
HEIGHT
2865
12-Aug-2023
22:44



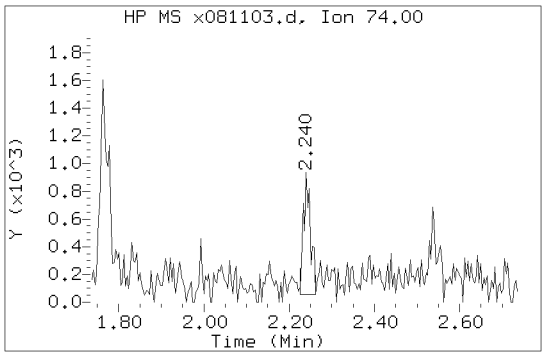
AFTER
MASS
43
AREA
3113
HEIGHT
2865
12-Aug-2023
22:44



BEFORE
MASS
74
AREA
1029
HEIGHT
883
12-Aug-2023
22:44



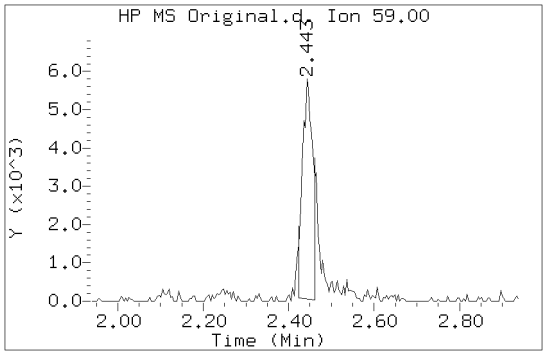
AFTER
MASS
74
AREA
1029
HEIGHT
883
12-Aug-2023
22:44



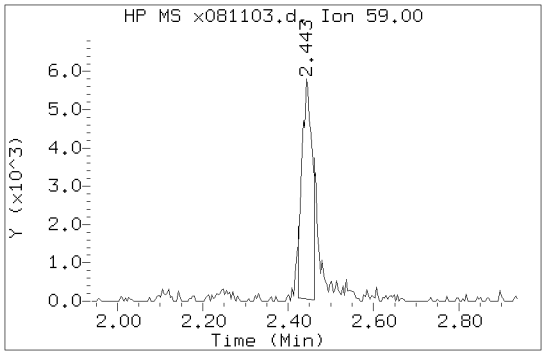
Tert-Butyl alcohol (75-65-0)

Reason Code:

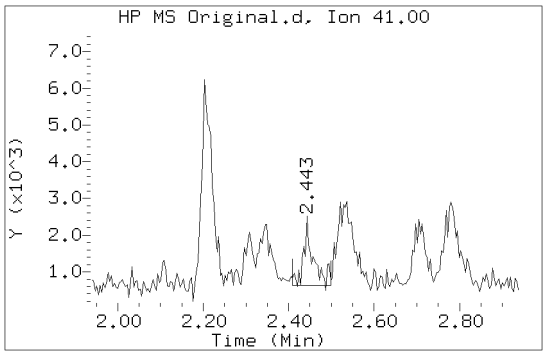
BEFORE
MASS
59
AREA
9824
HEIGHT
5748
12-Aug-2023
22:44



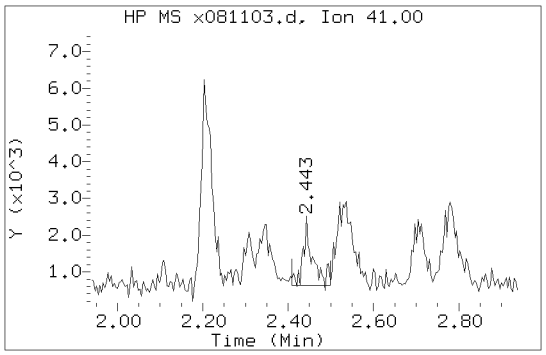
AFTER
MASS
59
AREA
9824
HEIGHT
5748
12-Aug-2023
22:44



BEFORE
MASS
41
AREA
2907
HEIGHT
1883
12-Aug-2023
22:44



AFTER
MASS
41
AREA
2907
HEIGHT
1883
12-Aug-2023
22:44

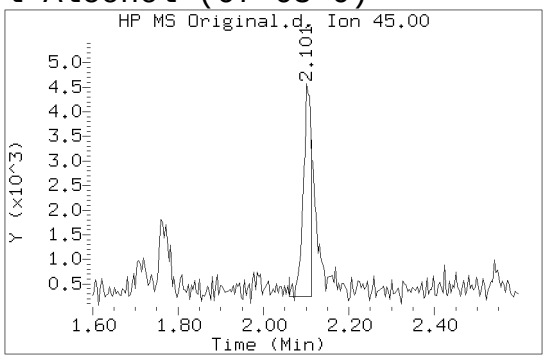


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InstruID : voa6.i
LabSampID : VSTD000.5

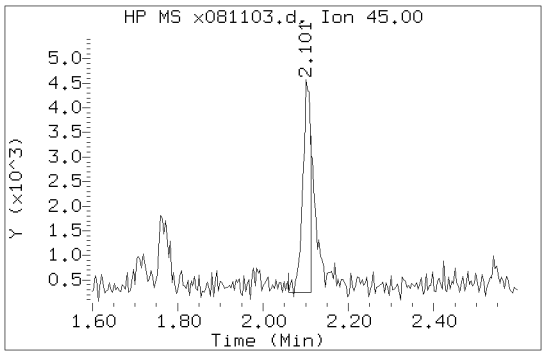
Isopropyl Alcohol (67-63-0)

Reason Code:

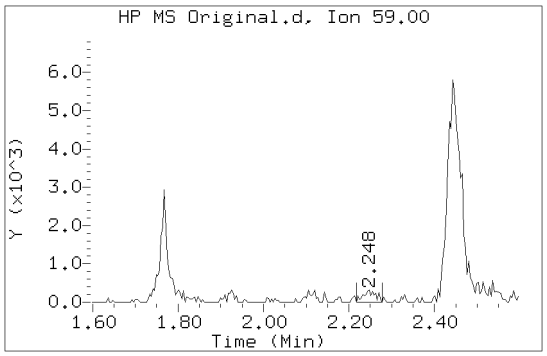
BEFORE
MASS
45
AREA
5543
HEIGHT
4320
12-Aug-2023
22:44



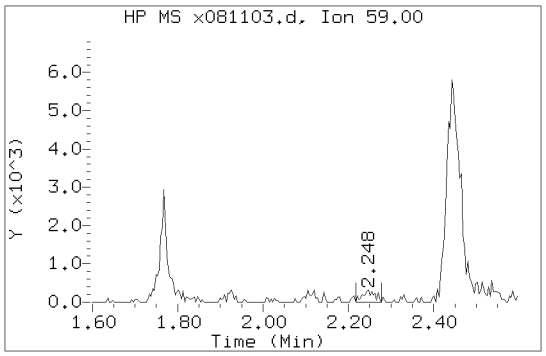
AFTER
MASS
45
AREA
5543
HEIGHT
4320
12-Aug-2023
22:44



BEFORE
MASS
59
AREA
626
HEIGHT
320
12-Aug-2023
22:44



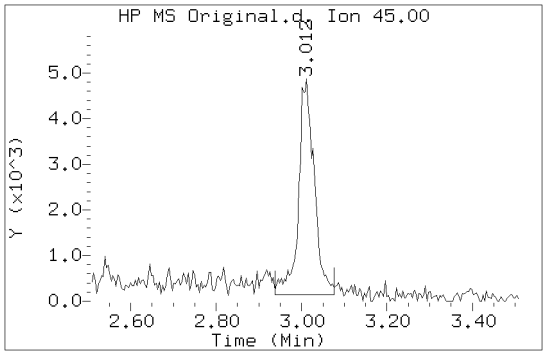
AFTER
MASS
59
AREA
626
HEIGHT
320
12-Aug-2023
22:44



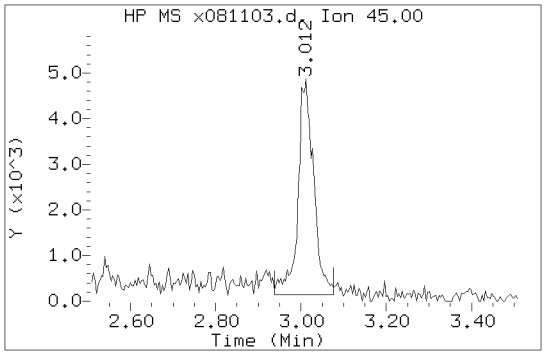
Diisopropyl ether (108-20-3)

Reason Code:

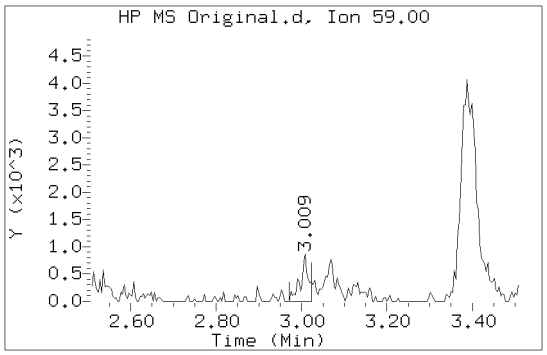
BEFORE
MASS
45
AREA
12268
HEIGHT
4726
12-Aug-2023
22:44



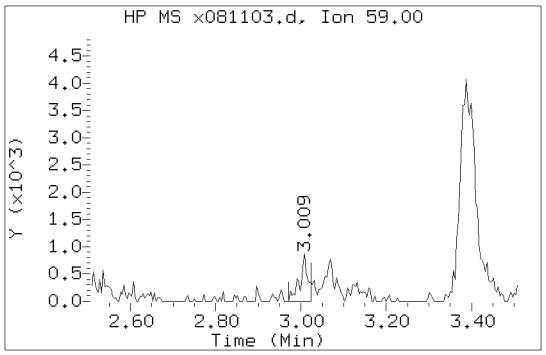
AFTER
MASS
45
AREA
12268
HEIGHT
4726
12-Aug-2023
22:44



BEFORE
MASS
59
AREA
1145
HEIGHT
874
12-Aug-2023
22:44



AFTER
MASS
59
AREA
1145
HEIGHT
874
12-Aug-2023
22:44

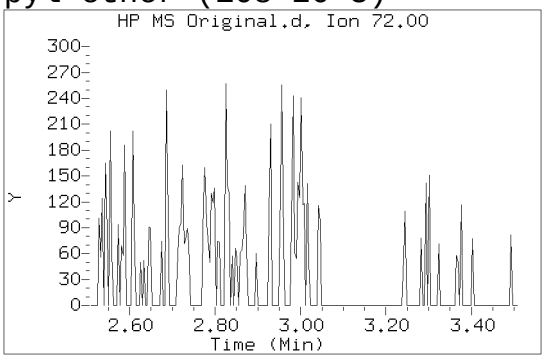


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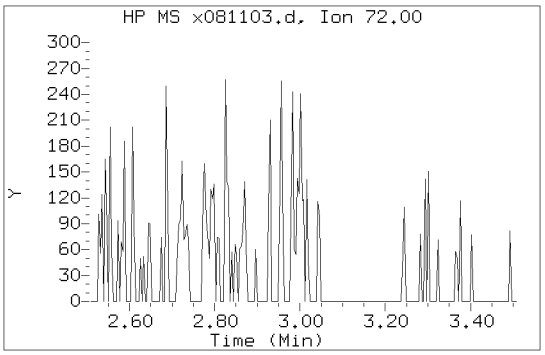
Diisopropyl ether (108-20-3)

Reason Code:

BEFORE
MASS
72
AREA
0
HEIGHT
0
12-Aug-2023
22:44



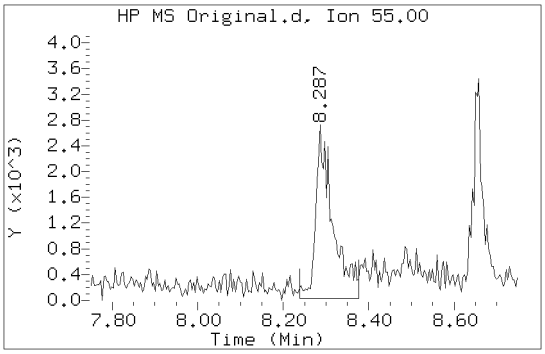
AFTER
MASS
72
AREA
0
HEIGHT
0
12-Aug-2023
22:44



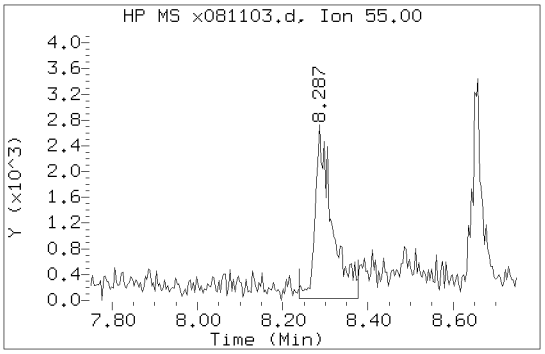
Butyl acrylate (141-32-2)

Reason Code:

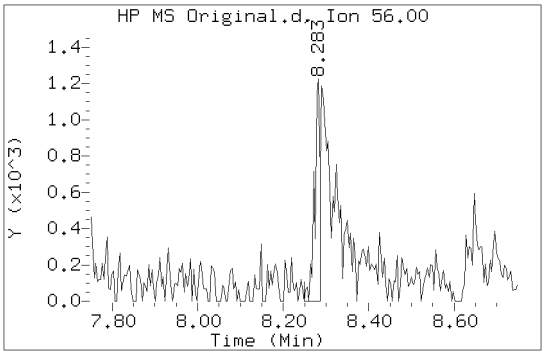
BEFORE
MASS
55
AREA
7408
HEIGHT
2692
12-Aug-2023
22:44



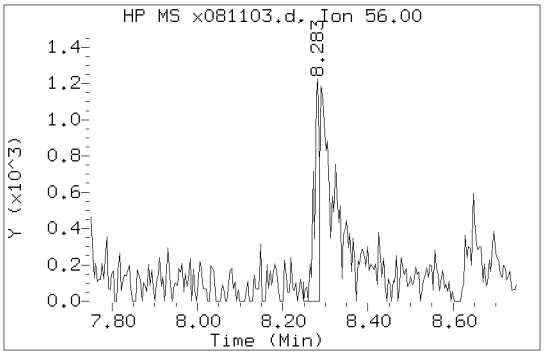
AFTER
MASS
55
AREA
7408
HEIGHT
2692
12-Aug-2023
22:44



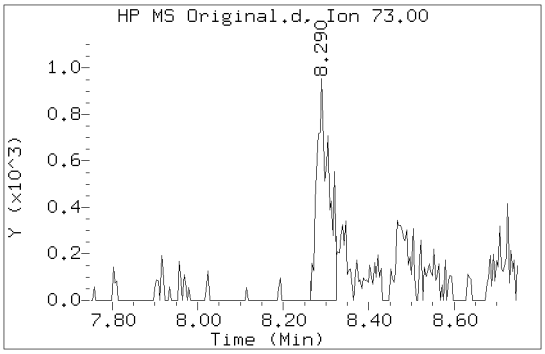
BEFORE
MASS
56
AREA
1036
HEIGHT
1225
12-Aug-2023
22:44



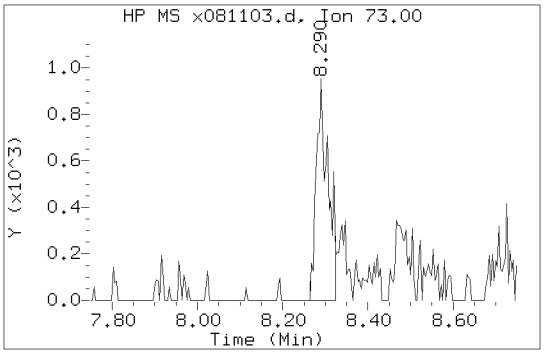
AFTER
MASS
56
AREA
1036
HEIGHT
1225
12-Aug-2023
22:44



BEFORE
MASS
73
AREA
1810
HEIGHT
954
12-Aug-2023
22:44



AFTER
MASS
73
AREA
1810
HEIGHT
954
12-Aug-2023
22:44

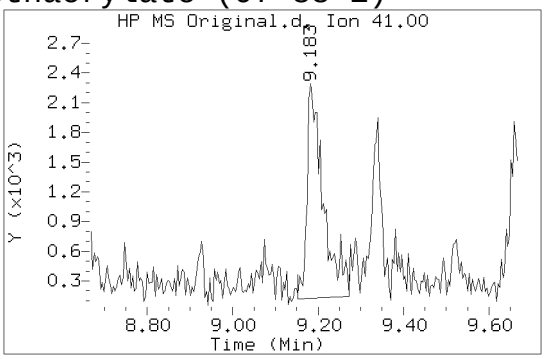


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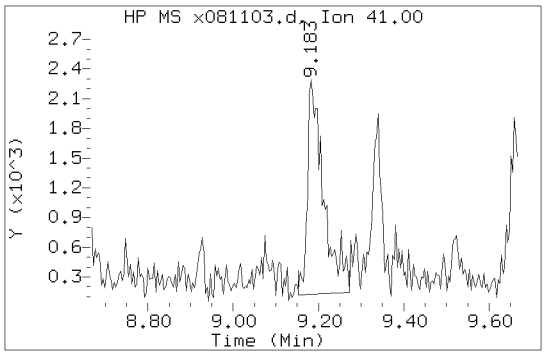
Butyl methacrylate (97-88-1)

Reason Code:

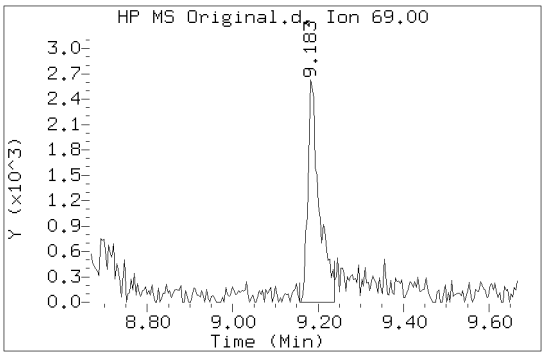
BEFORE
MASS
41
AREA
5695
HEIGHT
2167
12-Aug-2023
22:44



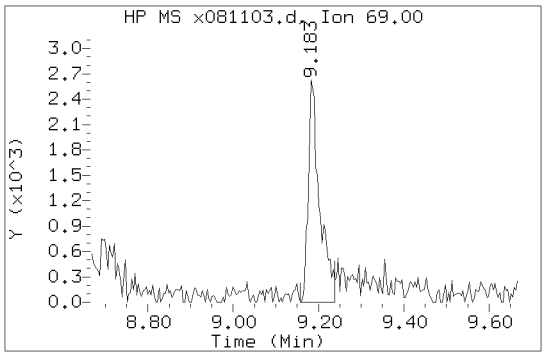
AFTER
MASS
41
AREA
5695
HEIGHT
2167
12-Aug-2023
22:44



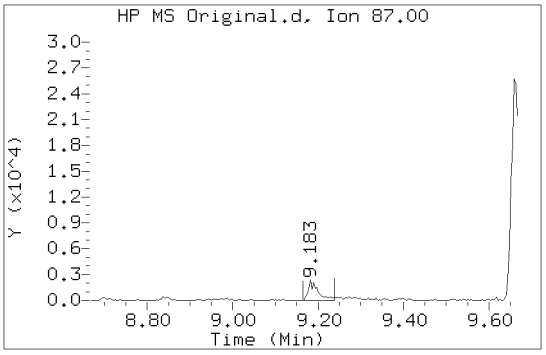
BEFORE
MASS
69
AREA
4890
HEIGHT
2628
12-Aug-2023
22:44



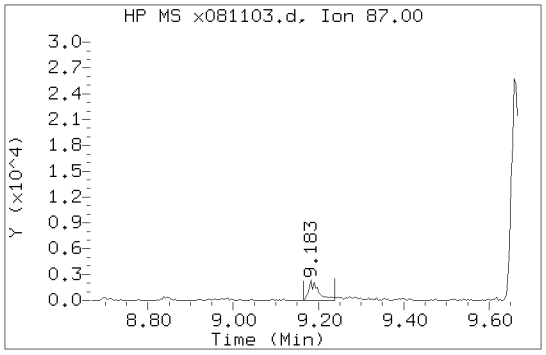
AFTER
MASS
69
AREA
4890
HEIGHT
2628
12-Aug-2023
22:44



BEFORE
MASS
87
AREA
3614
HEIGHT
2362
12-Aug-2023
22:44



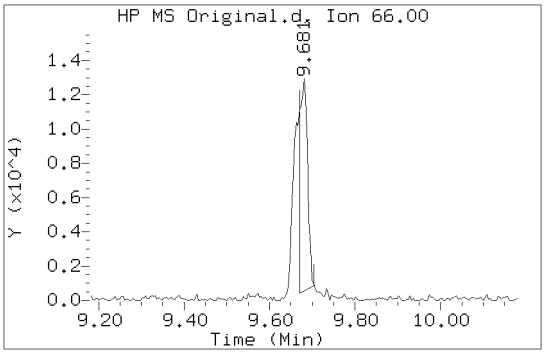
AFTER
MASS
87
AREA
3614
HEIGHT
2362
12-Aug-2023
22:44



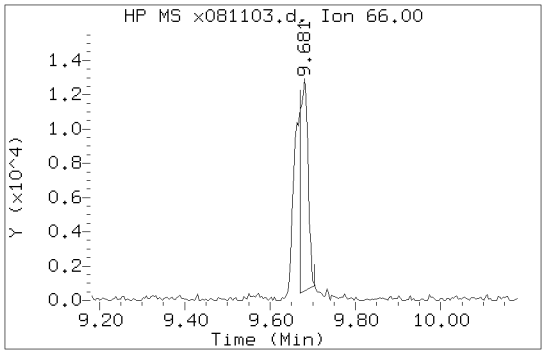
Dicyclopentadiene (77-73-6)

Reason Code:

BEFORE
MASS
66
AREA
16221
HEIGHT
12389
12-Aug-2023
22:44



AFTER
MASS
66
AREA
16221
HEIGHT
12389
12-Aug-2023
22:44



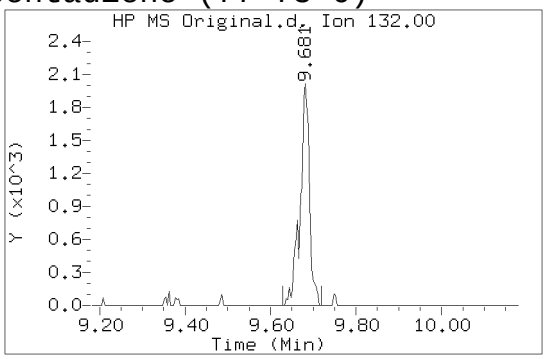
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

Dicyclopentadiene (77-73-6)

Reason Code:

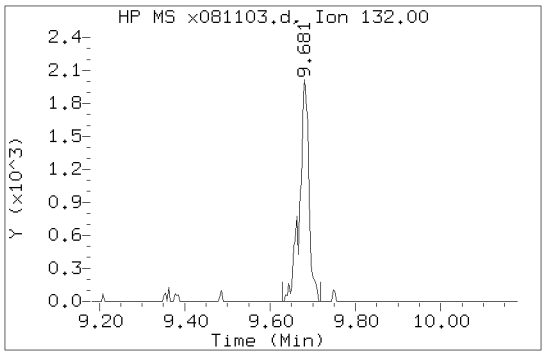
BEFORE

MASS
132
AREA
3184
HEIGHT
2016
12-Aug-2023
22:44



AFTER

MASS
132
AREA
3184
HEIGHT
2016
12-Aug-2023
22:44

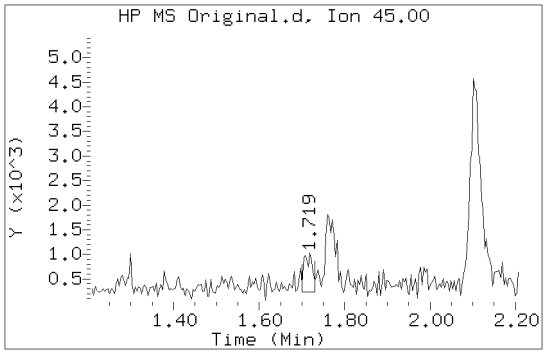


Ethanol (64-17-5)

Reason Code:

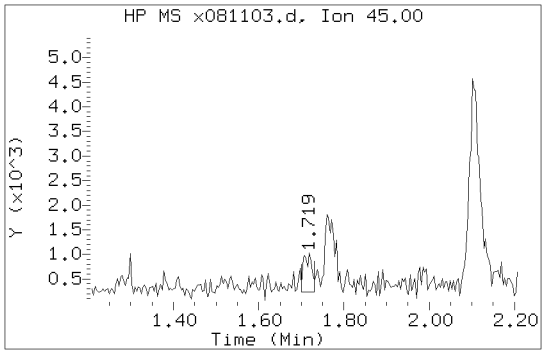
BEFORE

MASS
45
AREA
1086
HEIGHT
790
12-Aug-2023
22:44



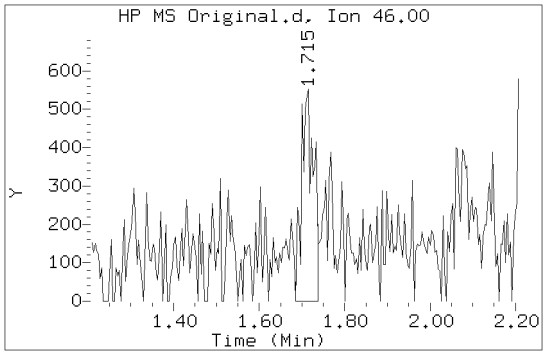
AFTER

MASS
45
AREA
1086
HEIGHT
790
12-Aug-2023
22:44



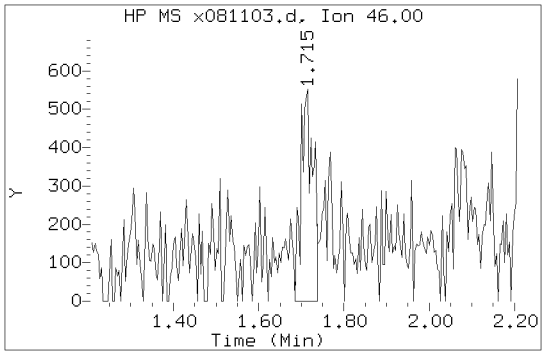
BEFORE

MASS
46
AREA
1108
HEIGHT
552
12-Aug-2023
22:44



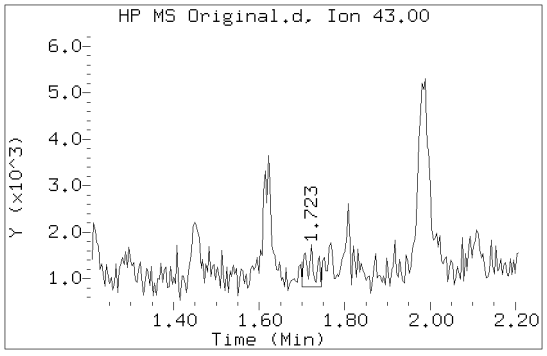
AFTER

MASS
46
AREA
1108
HEIGHT
552
12-Aug-2023
22:44



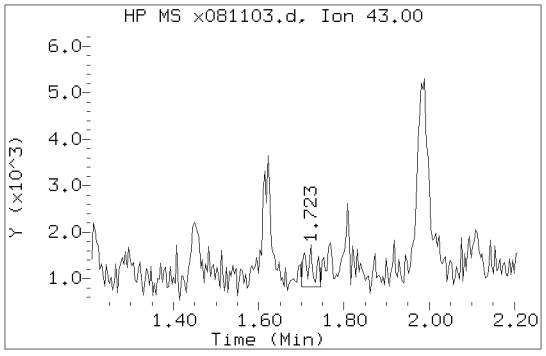
BEFORE

MASS
43
AREA
1223
HEIGHT
914
12-Aug-2023
22:44



AFTER

MASS
43
AREA
1223
HEIGHT
914
12-Aug-2023
22:44

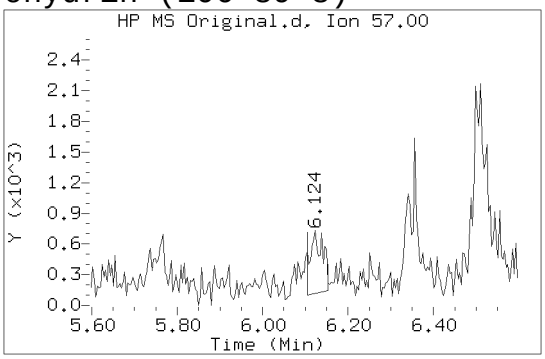


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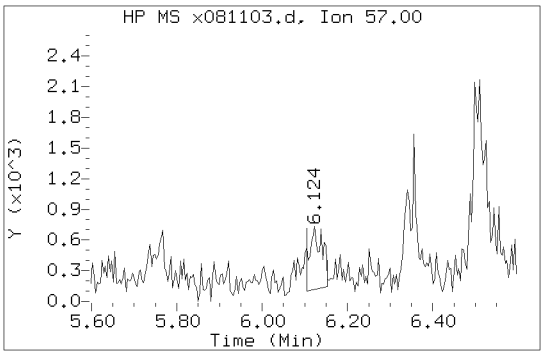
Epichlorohydrin (106-89-8)

Reason Code:

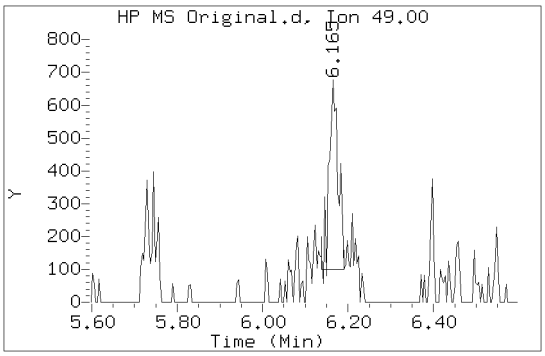
BEFORE
MASS
57
AREA
1253
HEIGHT
612
12-Aug-2023
22:44



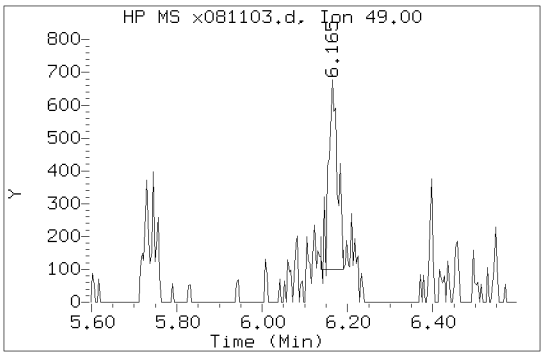
AFTER
MASS
57
AREA
1253
HEIGHT
612
12-Aug-2023
22:44



BEFORE
MASS
49
AREA
837
HEIGHT
578
12-Aug-2023
22:44



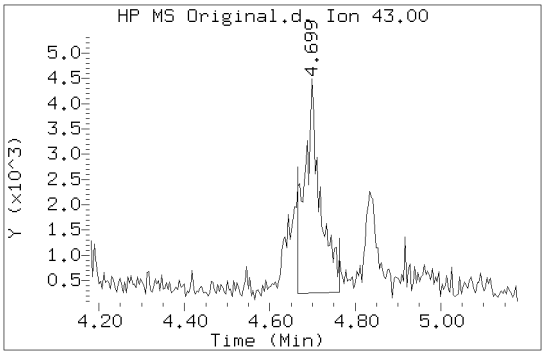
AFTER
MASS
49
AREA
837
HEIGHT
578
12-Aug-2023
22:44



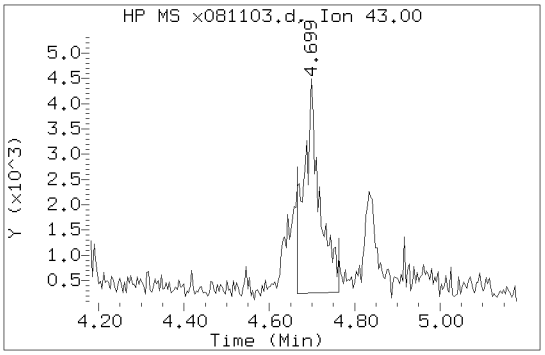
Isopropyl acetate (108-21-4)

Reason Code:

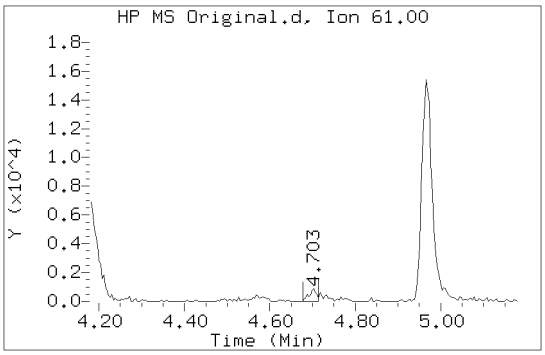
BEFORE
MASS
43
AREA
11001
HEIGHT
4233
12-Aug-2023
22:44



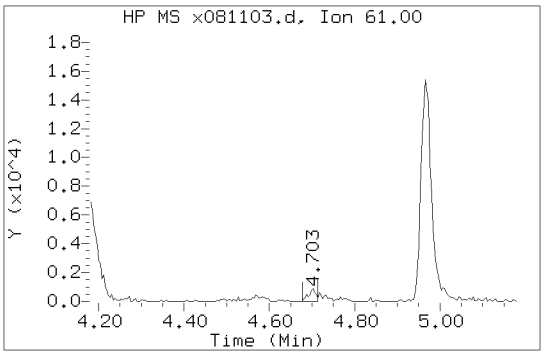
AFTER
MASS
43
AREA
11001
HEIGHT
4233
12-Aug-2023
22:44



BEFORE
MASS
61
AREA
1050
HEIGHT
880
12-Aug-2023
22:44



AFTER
MASS
61
AREA
1050
HEIGHT
880
12-Aug-2023
22:44

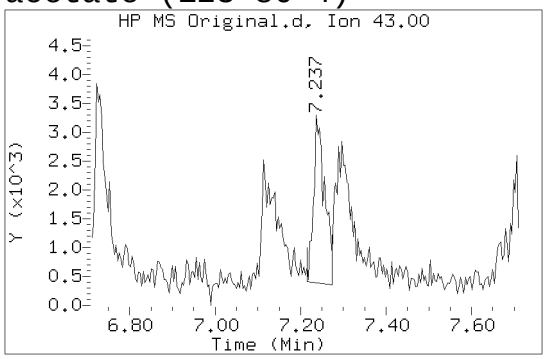


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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

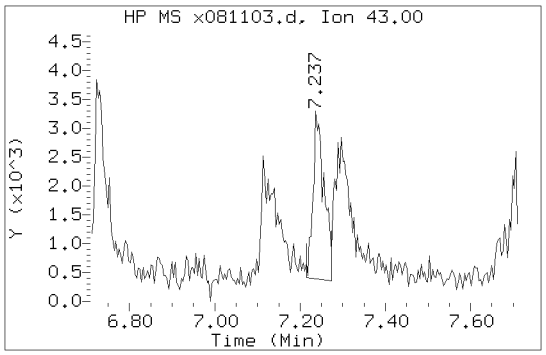
n-Butyl acetate (123-86-4)

Reason Code:

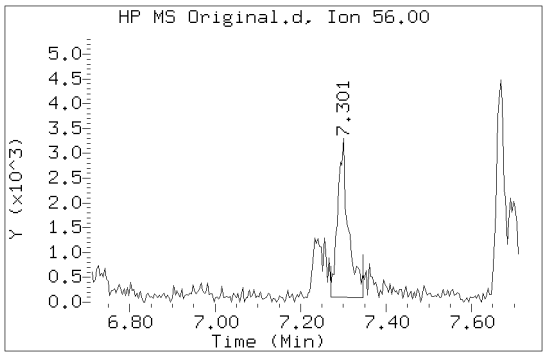
BEFORE
MASS
43
AREA
5274
HEIGHT
2906
12-Aug-2023
22:44



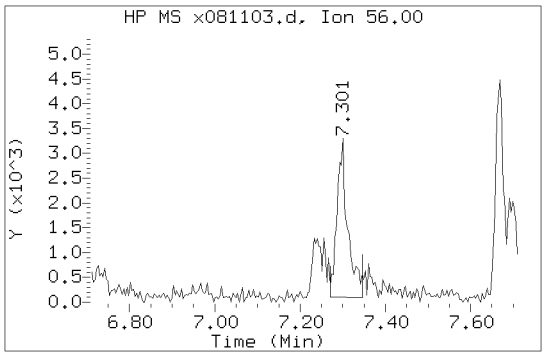
AFTER
MASS
43
AREA
5274
HEIGHT
2906
12-Aug-2023
22:44



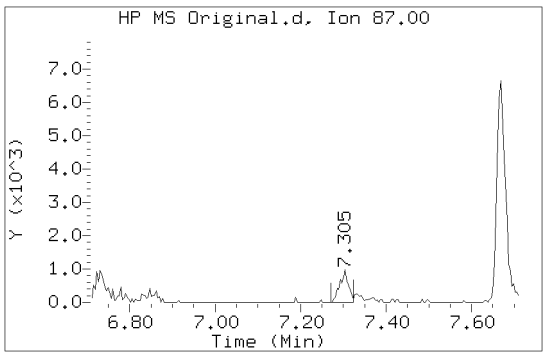
BEFORE
MASS
56
AREA
5628
HEIGHT
3206
12-Aug-2023
22:44



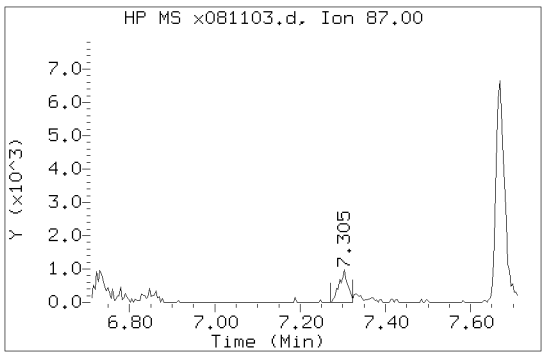
AFTER
MASS
56
AREA
5628
HEIGHT
3206
12-Aug-2023
22:44



BEFORE
MASS
87
AREA
1348
HEIGHT
975
12-Aug-2023
22:44



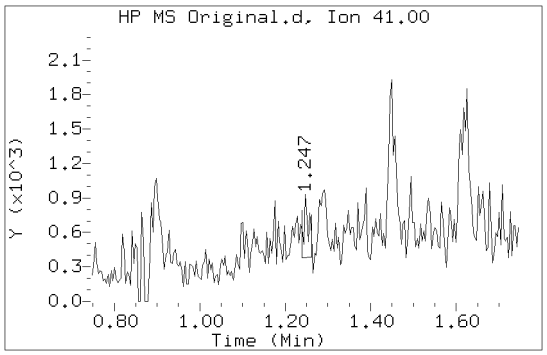
AFTER
MASS
87
AREA
1348
HEIGHT
975
12-Aug-2023
22:44



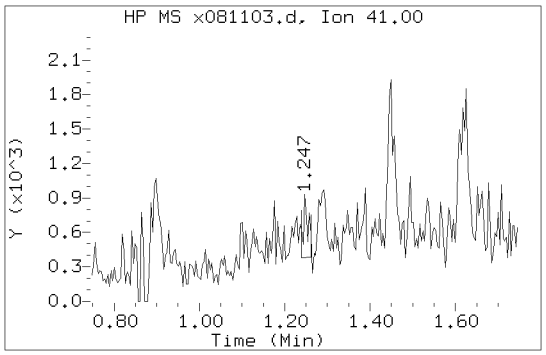
Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
41
AREA
444
HEIGHT
549
12-Aug-2023
22:44



AFTER
MASS
41
AREA
444
HEIGHT
549
12-Aug-2023
22:44



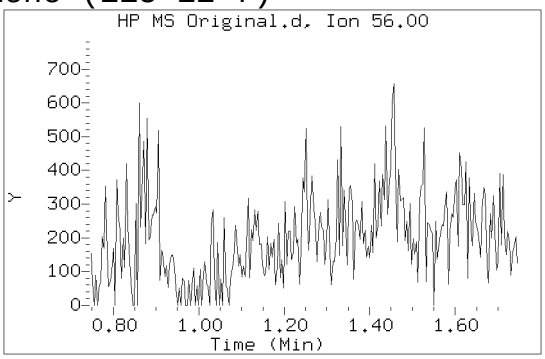
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Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutylene (115-11-7)

Reason Code:

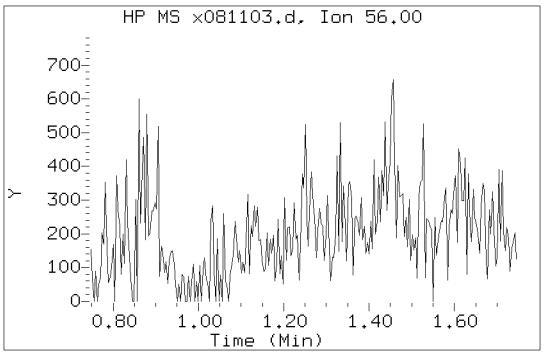
BEFORE

MASS
56
AREA
0
HEIGHT
0
12-Aug-2023
22:44



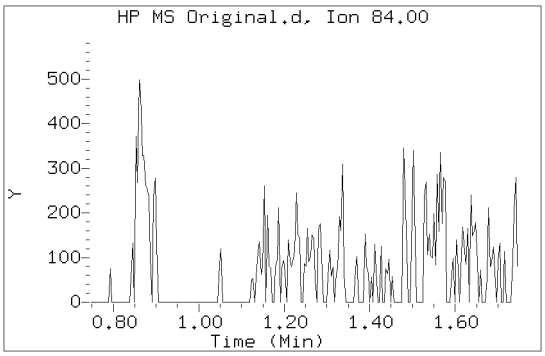
AFTER

MASS
56
AREA
0
HEIGHT
0
12-Aug-2023
22:44



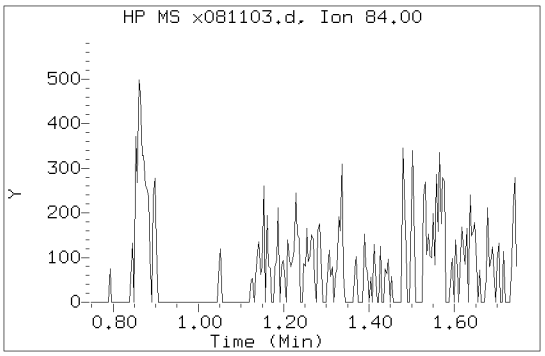
BEFORE

MASS
84
AREA
0
HEIGHT
0
12-Aug-2023
22:44



AFTER

MASS
84
AREA
0
HEIGHT
0
12-Aug-2023
22:44

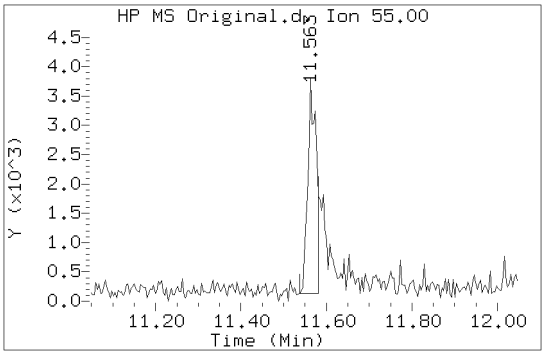


2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

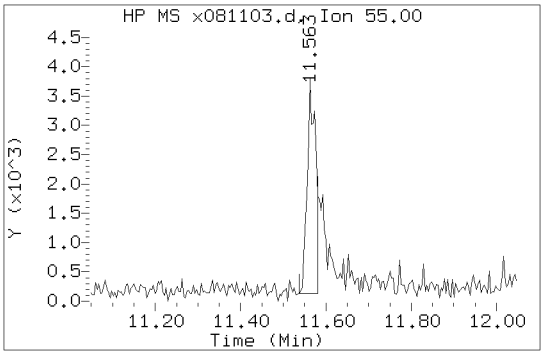
BEFORE

MASS
55
AREA
5026
HEIGHT
3664
12-Aug-2023
22:44



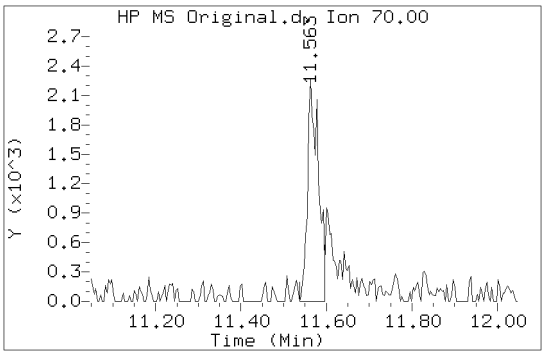
AFTER

MASS
55
AREA
5026
HEIGHT
3664
12-Aug-2023
22:44



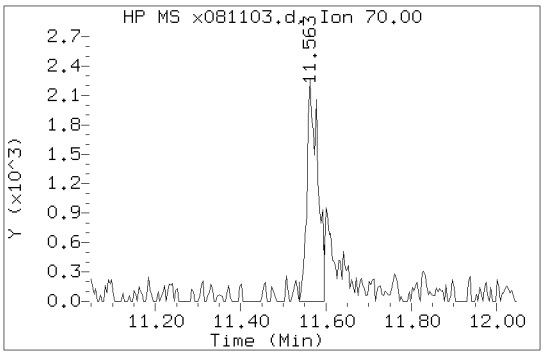
BEFORE

MASS
70
AREA
4004
HEIGHT
2261
12-Aug-2023
22:44



AFTER

MASS
70
AREA
4004
HEIGHT
2261
12-Aug-2023
22:44

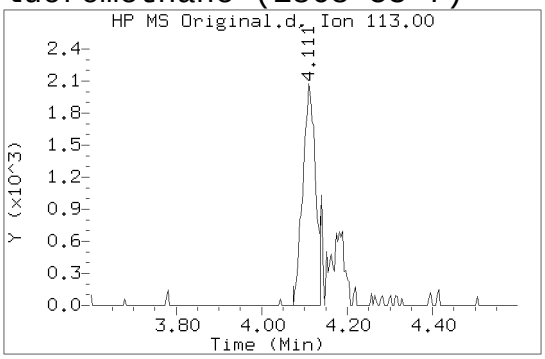


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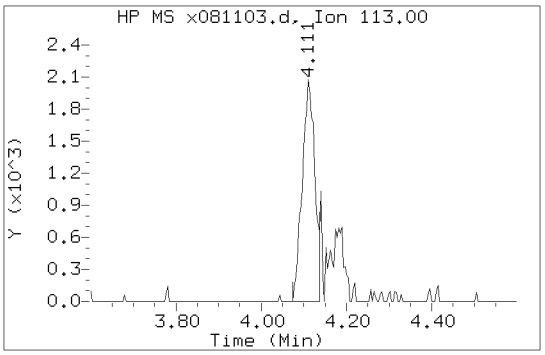
Dibromofluoromethane (1868-53-7)

Reason Code:

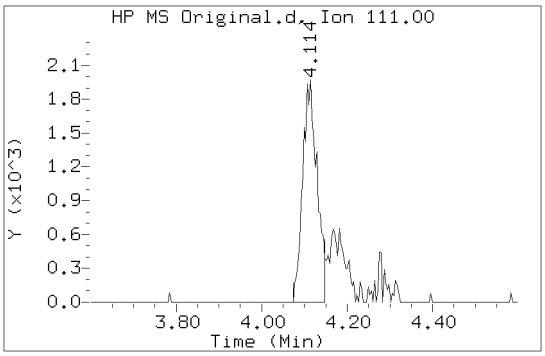
BEFORE
MASS
113
AREA
4322
HEIGHT
2075
12-Aug-2023
22:44



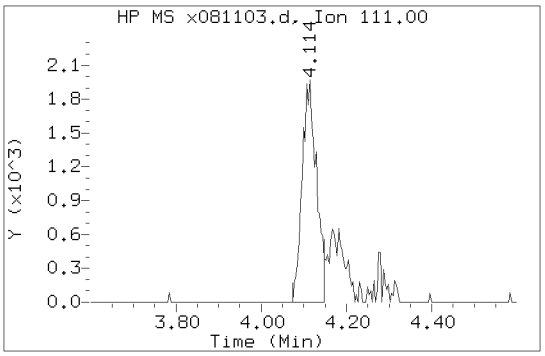
AFTER
MASS
113
AREA
4322
HEIGHT
2075
12-Aug-2023
22:44



BEFORE
MASS
111
AREA
4651
HEIGHT
1971
12-Aug-2023
22:44



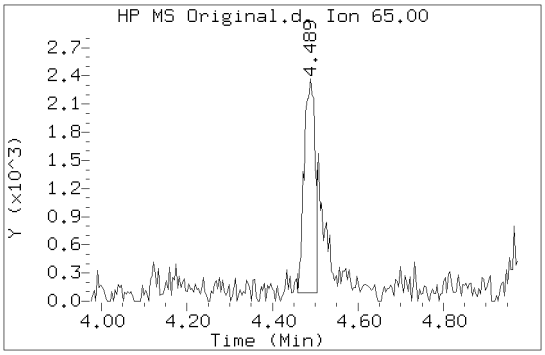
AFTER
MASS
111
AREA
4651
HEIGHT
1971
12-Aug-2023
22:44



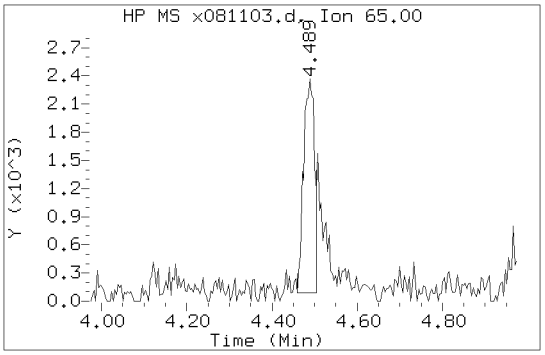
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

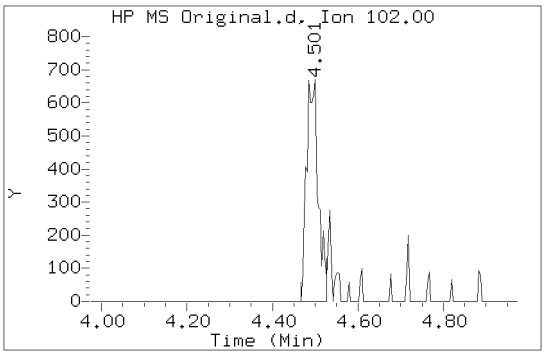
BEFORE
MASS
65
AREA
4095
HEIGHT
2282
12-Aug-2023
22:44



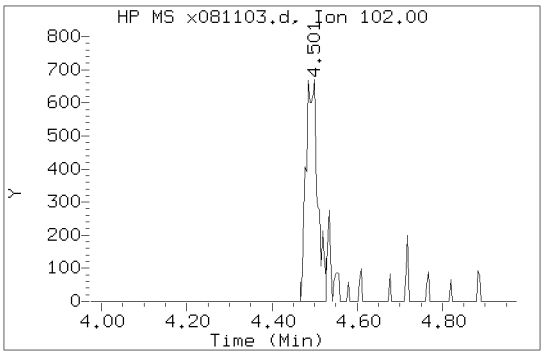
AFTER
MASS
65
AREA
4095
HEIGHT
2282
12-Aug-2023
22:44



BEFORE
MASS
102
AREA
1289
HEIGHT
670
12-Aug-2023
22:44



AFTER
MASS
102
AREA
1289
HEIGHT
670
12-Aug-2023
22:44

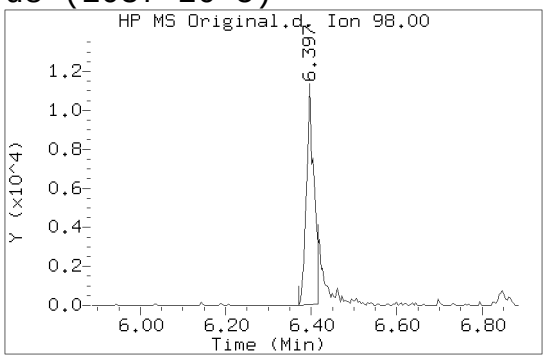


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InstruID : voa6.i
LabSampID : VSTD000.5

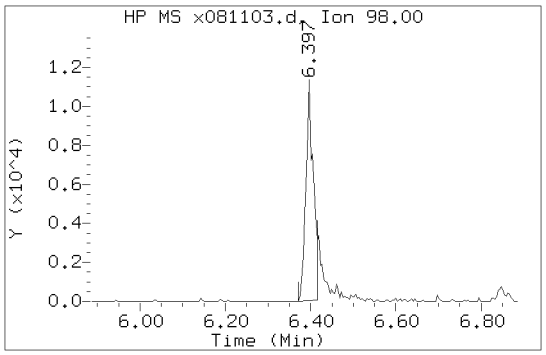
Toluene-d8 (2037-26-5)

Reason Code:

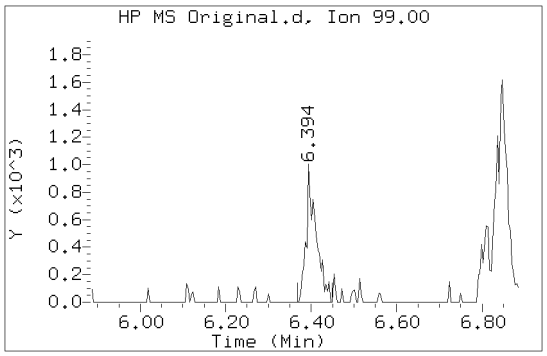
BEFORE
MASS
98
AREA
14098
HEIGHT
11322
12-Aug-2023
22:44



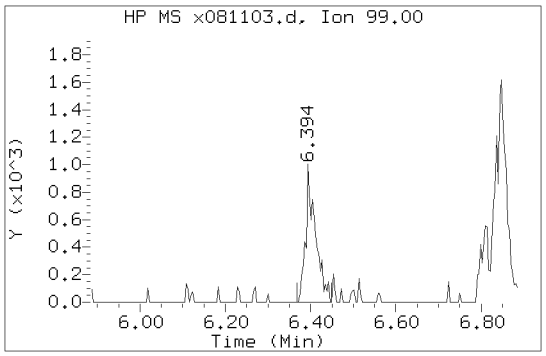
AFTER
MASS
98
AREA
14098
HEIGHT
11322
12-Aug-2023
22:44



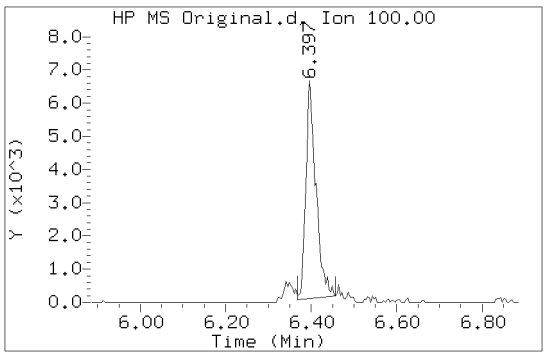
BEFORE
MASS
99
AREA
1644
HEIGHT
1004
12-Aug-2023
22:44



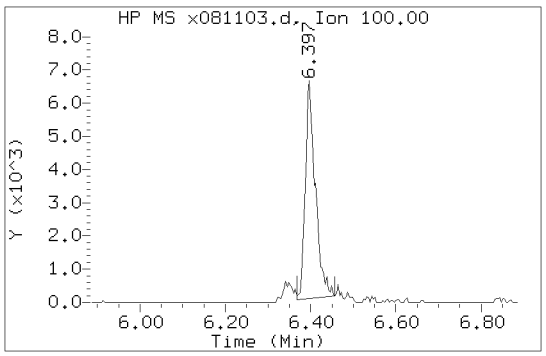
AFTER
MASS
99
AREA
1644
HEIGHT
1004
12-Aug-2023
22:44



BEFORE
MASS
100
AREA
11024
HEIGHT
6567
12-Aug-2023
22:44



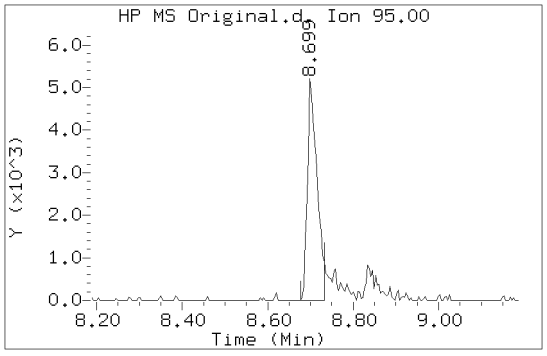
AFTER
MASS
100
AREA
11024
HEIGHT
6567
12-Aug-2023
22:44



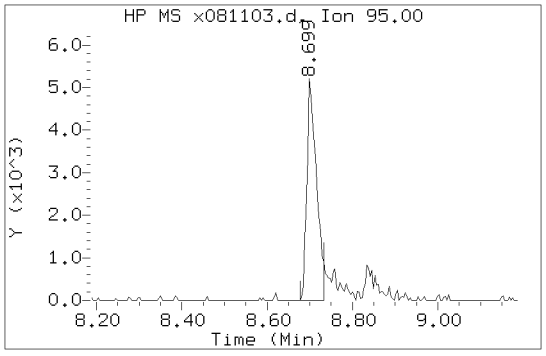
4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE
MASS
95
AREA
8224
HEIGHT
5209
12-Aug-2023
22:44



AFTER
MASS
95
AREA
8224
HEIGHT
5209
12-Aug-2023
22:44



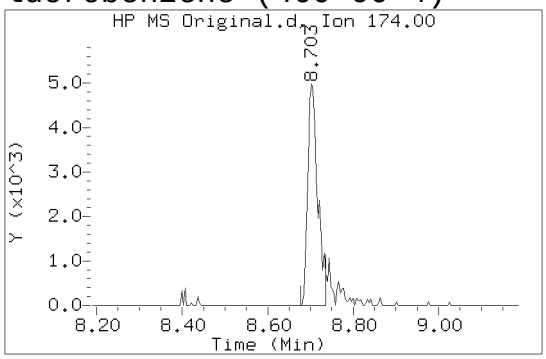
Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081103.d
Inj Date : 11-AUG-2023 12:14
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

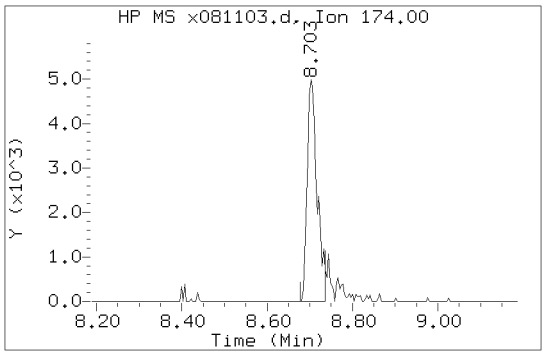
BEFORE

MASS
174
AREA
8171
HEIGHT
4985
12-Aug-2023
22:44



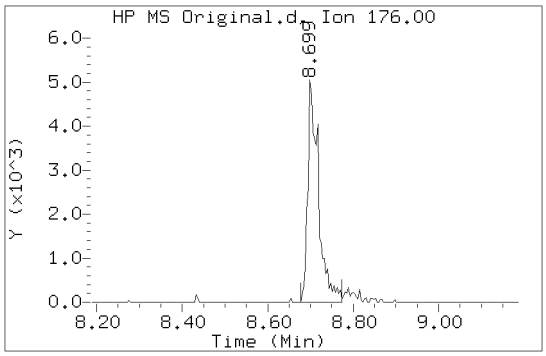
AFTER

MASS
174
AREA
8171
HEIGHT
4985
12-Aug-2023
22:44



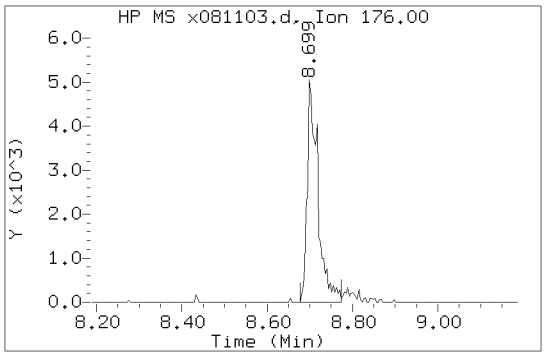
BEFORE

MASS
176
AREA
8906
HEIGHT
5051
12-Aug-2023
22:44



AFTER

MASS
176
AREA
8906
HEIGHT
5051
12-Aug-2023
22:44



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081104.D Page 1
Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081104.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 11-AUG-2023 12:35
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 12:14 Cal File: X081103.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.181	4.181	(1.000)	588670	50.0000	
135	1,4-Dioxane	88	5.621	5.621	(1.344)	1553	20.0000	20.75(M)
140	1,3-Butadiene	54	1.171	1.171	(0.280)	5912	1.00000	0.97
25	Methacrylonitrile	41	3.866	3.866	(0.925)	5673	1.00000	0.96(M)
12	Isobutyl Alcohol	43	4.702	4.702	(1.125)	17428	20.0000	18.88(M)
13	Acetonitrile	39	2.206	2.206	(0.528)	9985	10.0000	10.99
14	Allyl Chloride	41	2.210	2.210	(0.528)	19393	1.00000	1.08
4	Propionitrile	54	3.694	3.694	(0.883)	8585	10.0000	10.47(M)
136	n-Hexane	57	2.776	2.776	(0.664)	6841	1.00000	0.37(M)
72	trans-1,4-Dichloro-2-butene	53	8.905	8.905	(1.161)	2338	1.00000	1.05(MH)
194	Acetaldehyde	44	1.212	1.212	(0.290)	4717	4.00000	(M)
23	Chloroprene	53	1.778	1.778	(0.425)	2637	1.00000	1.05(M)
145	alpha-Methylstyrene	118	9.272	9.272	(0.960)	9352	1.00000	0.92
200	Dimethyl Disulfide	94	6.202	6.202	(0.809)	10240	1.00000	0.88(M)
139	Diethyl ether	59	1.771	1.771	(0.424)	5859	1.00000	1.12(M)
130	Ethyl Acetate	43	3.675	3.675	(0.879)	6893	1.00000	1.02(M)
40	Methyl Methacrylate	41	5.636	5.636	(1.348)	5530	1.00000	1.02
49	Ethyl Methacrylate	69	6.794	6.794	(1.368)	8710	1.00000	1.03(H)
132	n-Butanol	56	5.370	5.370	(1.284)	2659	20.0000	83.82
142	Tetrahydrofuran	42	3.870	3.870	(0.926)	2426	2.00000	2.11

150	Allyl alcohol	57	2.776	2.776 (0.664)	4388	20.0000	
166	1,2,3-Trimethylbenzene	105	9.737	9.737 (1.008)	24047	1.00000	1.08

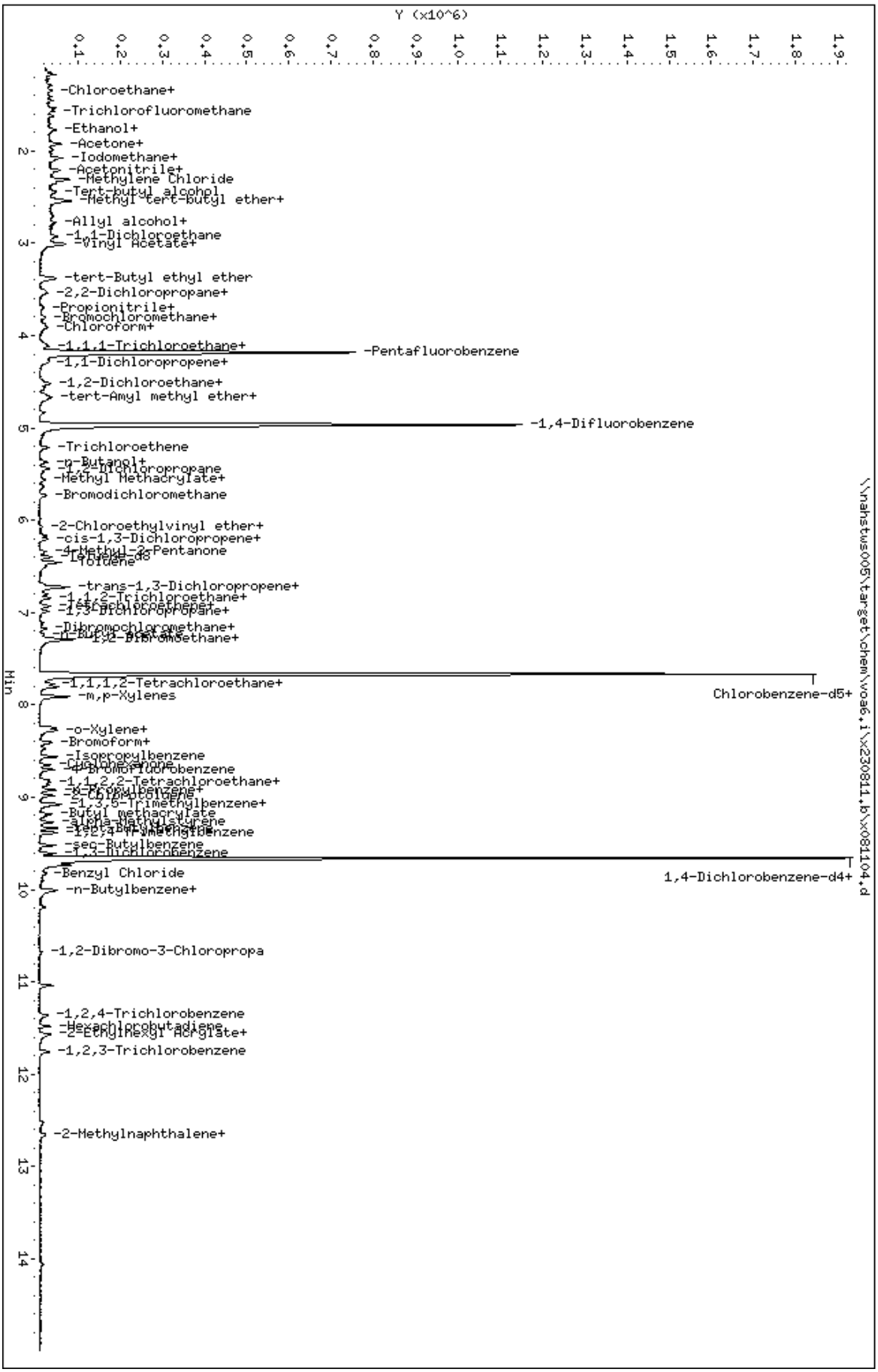
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.776	3.776	(0.903)	6078	1.00000	1.04(M)
	162	Butyl acrylate	55	8.275	8.275	(1.079)	14061	1.00000	0.97(M)
	2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	4328	1.00000	1.45
	3	Chloromethane	50	1.085	1.085	(0.260)	6181	1.00000	1.07
	5	Vinyl Chloride	62	1.149	1.149	(0.275)	6615	1.00000	0.93
	6	Bromomethane	94	1.347	1.347	(0.322)	4430	1.00000	1.16(M)
	7	Chloroethane	64	1.411	1.411	(0.338)	5096	1.00000	1.10
	8	Trichlorofluoromethane	101	1.569	1.569	(0.375)	9051	1.00000	0.90(M)
	9	Acrolein	56	1.872	1.872	(0.448)	463	2.00000	(M)
	10	Acetone	43	1.985	1.985	(0.475)	9915	2.00000	
	11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	5761	1.00000	1.01
	15	Iodomethane	142	2.037	2.037	(0.487)	5195	2.00000	6.31
	16	Acrylonitrile	53	2.543	2.543	(0.608)	5718	2.00000	2.08(M)
	17	Methylene Chloride	84	2.303	2.303	(0.551)	8402	1.00000	1.17(M)
	18	Methyl tert-butyl ether	73	2.539	2.539	(0.607)	22118	1.00000	1.09
	19	Carbon Disulfide	76	2.078	2.078	(0.497)	33989	2.00000	2.01
	20	trans-1,2-Dichloroethene	96	2.539	2.539	(0.607)	7259	1.00000	1.09
	21	Vinyl Acetate	43	3.016	3.016	(0.721)	39484	2.00000	2.02
	22	1,1-Dichloroethane	63	2.929	2.929	(0.701)	14531	1.00000	1.16(M)
	24	2-Butanone	43	3.675	3.675	(0.879)	4169	2.00000	1.91(MH)
	26	2,2-Dichloropropane	77	3.522	3.522	(0.842)	9399	1.00000	1.10
	27	cis-1,2-Dichloroethene	96	3.544	3.544	(0.848)	6391	1.00000	1.00
	28	Chloroform	83	3.915	3.915	(0.936)	11723	1.00000	1.07
	29	Bromochloromethane	128	3.814	3.814	(0.912)	4447	1.00000	1.23
$	30	Dibromofluoromethane	113	4.114	4.114	(0.984)	5954	1.00000	0.28(M)
	31	1,1,1-Trichloroethane	97	4.084	4.084	(0.977)	7915	1.00000	0.90
	32	1,1-Dichloropropene	75	4.298	4.298	(0.866)	6485	1.00000	0.89(MH)
	33	1,2-Dichloroethane	62	4.564	4.564	(0.919)	9628	1.00000	1.10
	34	Carbon Tetrachloride	117	4.268	4.268	(0.860)	7329	1.00000	0.96(H)
$	35	1,2-Dichloroethane-d4	65	4.492	4.492	(1.074)	8038	1.00000	0.25
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	916625	50.0000	
	37	Benzene	78	4.522	4.522	(0.911)	23319	1.00000	1.03
	38	Trichloroethene	130	5.216	5.216	(1.051)	6331	1.00000	0.97
	39	Bromodichloromethane	83	5.730	5.730	(1.154)	9159	1.00000	1.08(M)
	41	2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	4418	2.00000	2.05
	42	1,2-Dichloropropane	63	5.441	5.441	(1.096)	6642	1.00000	1.04(M)
	44	Dibromomethane	93	5.557	5.557	(1.119)	5180	1.00000	1.19
	45	4-Methyl-2-Pentanone	43	6.341	6.341	(0.827)	13000	2.00000	2.05(M)
	46	cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	9439	1.00000	0.98
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	882965	50.0000	
$	48	Toluene-d8	98	6.397	6.397	(0.834)	20483	1.00000	0.98(M)
	50	Toluene	91	6.453	6.453	(0.842)	25633	1.00000	1.04
	51	trans-1,3-Dichloropropene	75	6.700	6.700	(1.350)	7645	1.00000	0.94
	52	2-Hexanone	43	7.109	7.109	(0.927)	8658	2.00000	2.03(M)
	53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	4999	1.00000	1.01
	54	1,3-Dichloropropane	76	6.989	6.989	(0.912)	11149	1.00000	1.11
	55	Dibromochloromethane	129	7.180	7.180	(0.936)	7075	1.00000	0.99
	56	Tetrachloroethene	164	6.933	6.933	(0.904)	4911	1.00000	0.96
	57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	5993	1.00000	1.00
	58	1-Chlorohexane	55	7.701	7.701	(1.551)	5712	1.00000	1.07(MH)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	17172	1.00000	1.01
	60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	6256	1.00000	0.95

61 Ethylbenzene	106	7.806	7.806 (1.018)	7990	1.00000	0.95
62 m,p-Xylenes	106	7.911	7.911 (1.032)	20041	2.00000	1.87

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63	o-Xylene	106	8.249	8.249	(1.076)	11068	1.00000	1.04
64	Styrene	104	8.275	8.275	(1.079)	15203	1.00000	0.86
66	Bromoform	173	8.414	8.414	(1.097)	4246	1.00000	0.88(T)
67	Isopropylbenzene	105	8.563	8.563	(1.117)	23483	1.00000	0.89
68	1,1,2,2-Tetrachloroethane	83	8.845	8.845	(0.915)	8236	1.00000	1.06
$ 69	4-Bromofluorobenzene	95	8.702	8.702	(1.135)	9648	1.00000	1.38
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	476655	50.0000	
71	1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	5998	1.00000	1.05
73	n-Propylbenzene	91	8.920	8.920	(0.923)	25092	1.00000	0.89
74	Bromobenzene	156	8.822	8.822	(0.913)	7675	1.00000	1.00
75	1,3,5-Trimethylbenzene	105	9.073	9.073	(0.939)	19765	1.00000	0.95
76	2-Chlorotoluene	91	8.980	8.980	(0.929)	19685	1.00000	1.09
77	4-Chlorotoluene	91	9.085	9.085	(0.940)	21461	1.00000	1.03
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	16538	1.00000	0.93
79	1,2,4-Trimethylbenzene	105	9.384	9.384	(0.971)	21634	1.00000	1.01
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	22253	1.00000	0.91
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	18770	1.00000	0.85
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	13626	1.00000	1.00
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	14768	1.00000	1.01
86	Benzyl Chloride	91	9.827	9.827	(1.282)	9809	1.00000	0.77(M)
87	n-Butylbenzene	91	10.007	10.007	(1.036)	15267	1.00000	2.70
88	1,2-Dichlorobenzene	146	10.003	10.003	(1.035)	14337	1.00000	1.04
89	1,2-Dibromo-3-Chloropropane	155	10.681	10.681	(1.106)	1274	1.00000	0.97(M)
90	1,2,4-Trichlorobenzene	180	11.360	11.360	(1.176)	8955	1.00000	0.98
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	4132	1.00000	0.61(M)
92	Naphthalene	128	11.574	11.574	(1.198)	23210	1.00000	1.02(M)
93	1,2,3-Trichlorobenzene	180	11.761	11.761	(1.217)	9119	1.00000	1.03
M 94	1,2-Dichloroethylene (total)	96				13650	2.00000	
M 95	Xylenes (total)	106				31109	3.00000	
141	Cyclohexane	56	4.114	4.114	(0.984)	5861	1.00000	2.55(H)
138	Freon TF	101	1.921	1.921	(0.459)	4459	1.00000	1.92
147	Methylcyclohexane	55	5.373	5.373	(1.082)	13003	1.00000	0.94(M)
146	Methyl Acetate	43	2.247	2.247	(0.537)	5952	1.00000	1.12(M)
148	Tert-Butyl alcohol	59	2.438	2.438	(0.583)	18788	20.0000	13.85(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

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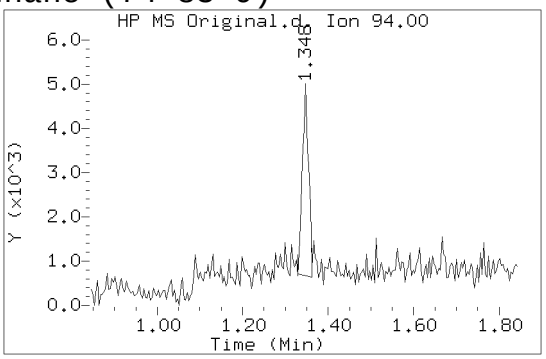
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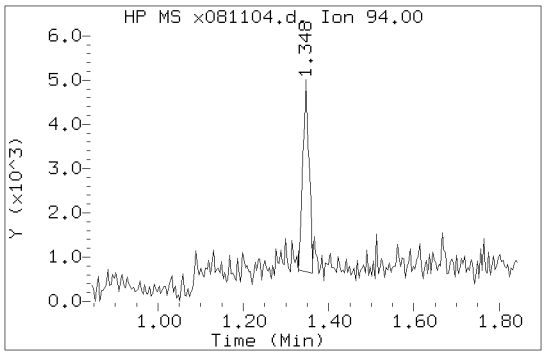
Bromomethane (74-83-9)

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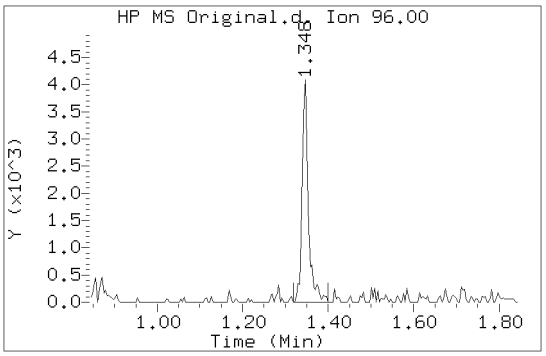
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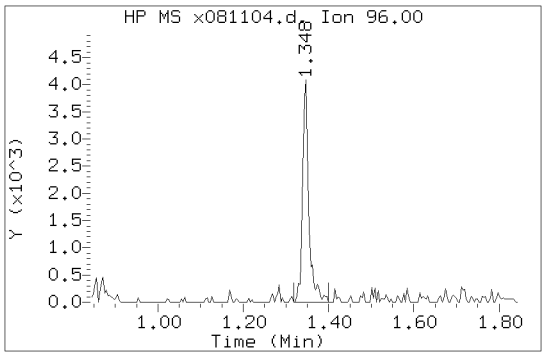
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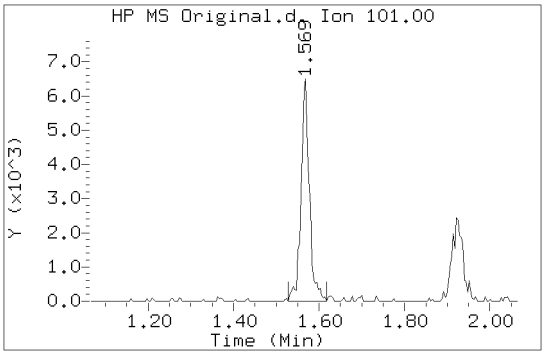
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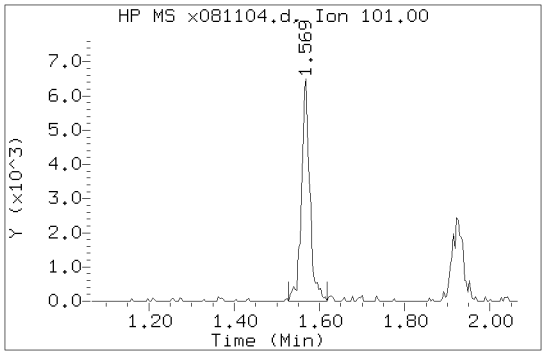
Trichlorofluoromethane (75-69-4)

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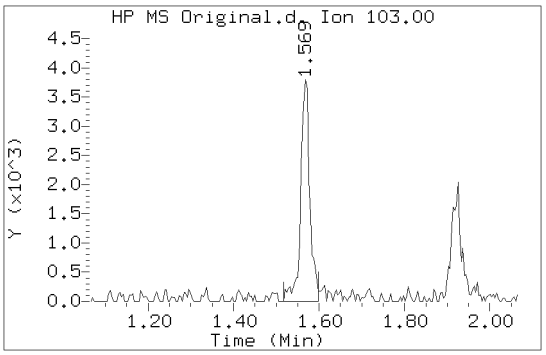
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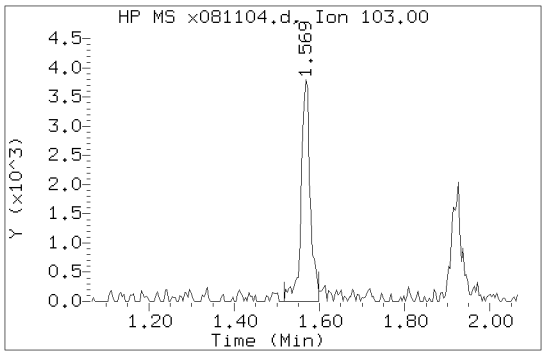
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AFTER
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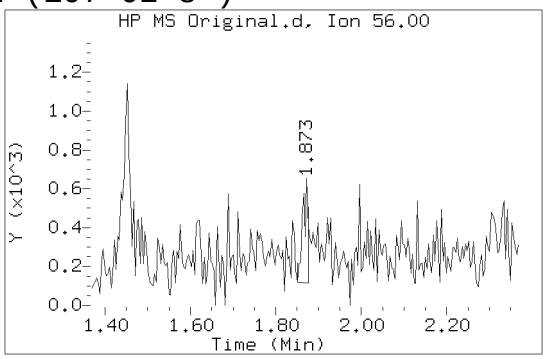


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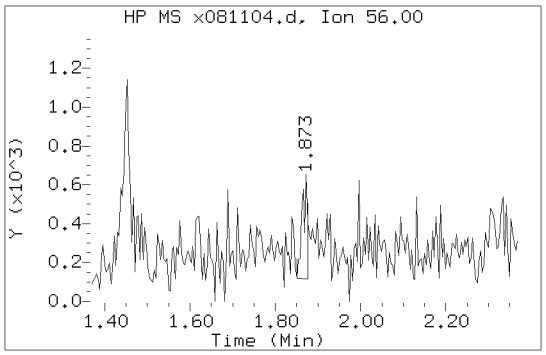
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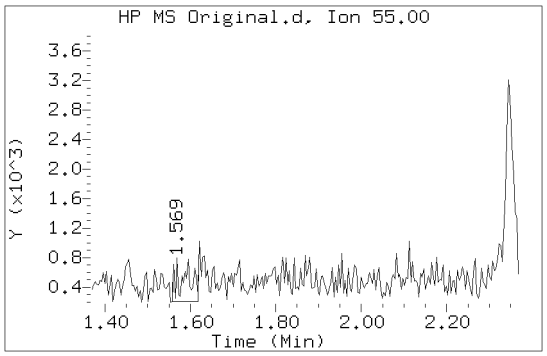
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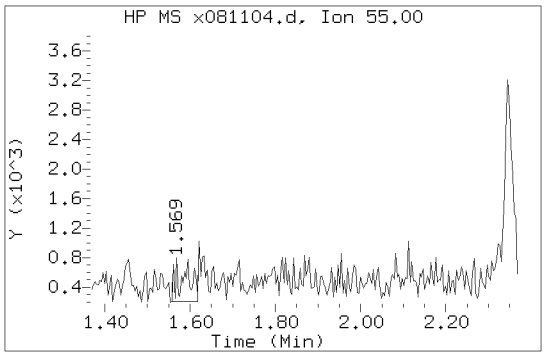
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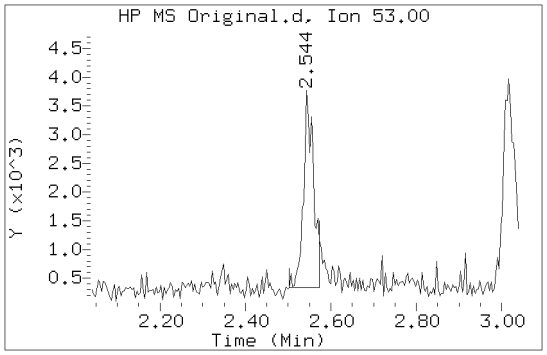
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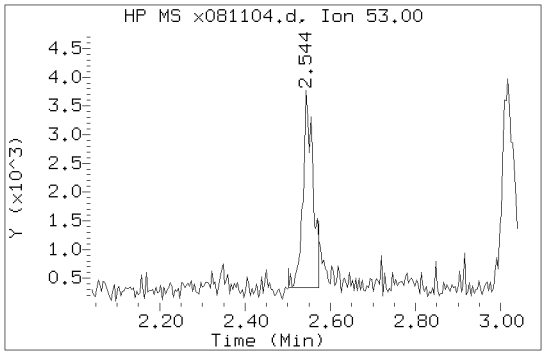
Acrylonitrile (107-13-1)

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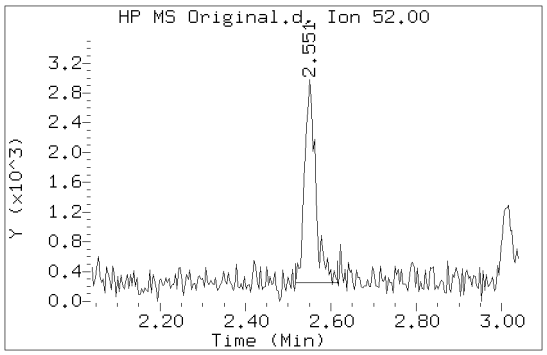
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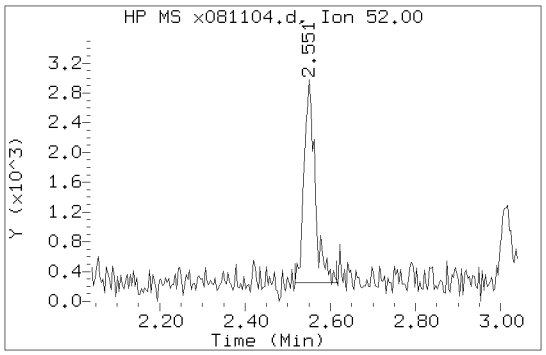
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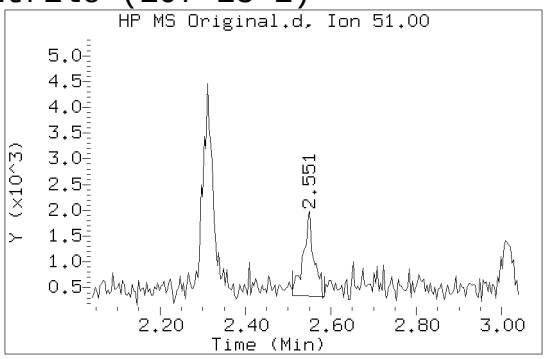
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LabSampID : VSTD001

Acrylonitrile (107-13-1)

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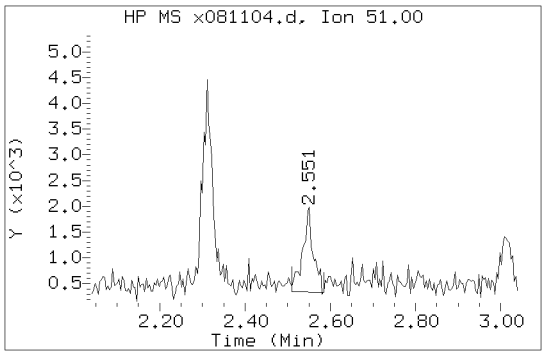
BEFORE

MASS
51
AREA
2867
HEIGHT
1646
12-Aug-2023
22:50



AFTER

MASS
51
AREA
2867
HEIGHT
1646
12-Aug-2023
22:50

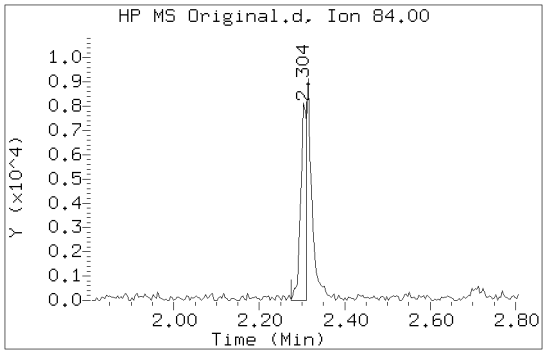


Methylene Chloride (75-09-2)

Reason Code:

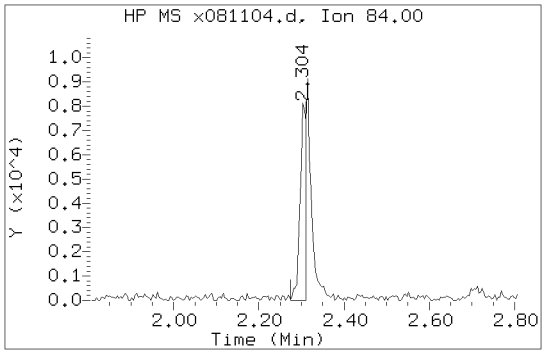
BEFORE

MASS
84
AREA
8402
HEIGHT
8122
12-Aug-2023
22:50



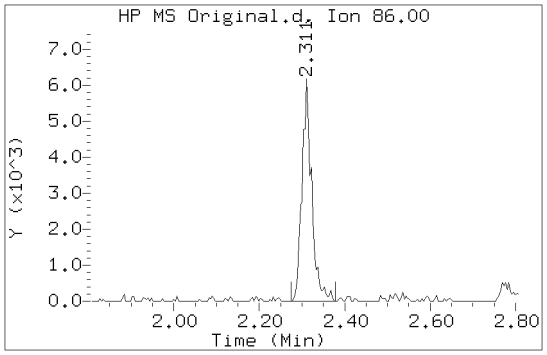
AFTER

MASS
84
AREA
8402
HEIGHT
8122
12-Aug-2023
22:50



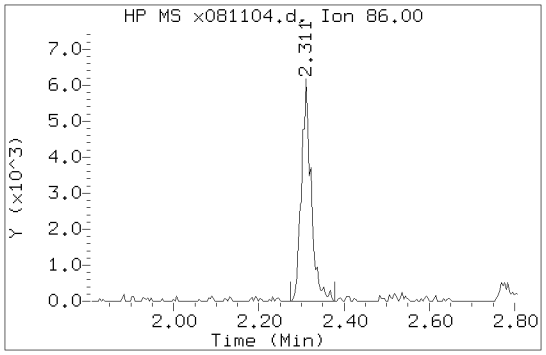
BEFORE

MASS
86
AREA
9806
HEIGHT
6172
12-Aug-2023
22:50



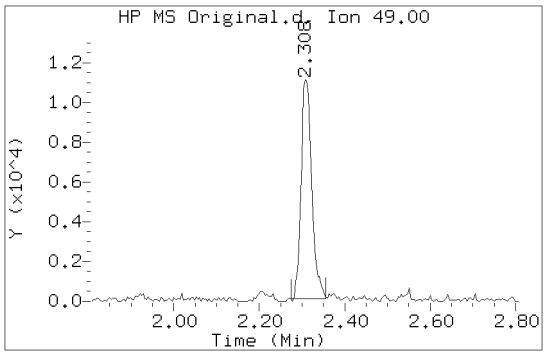
AFTER

MASS
86
AREA
9806
HEIGHT
6172
12-Aug-2023
22:50



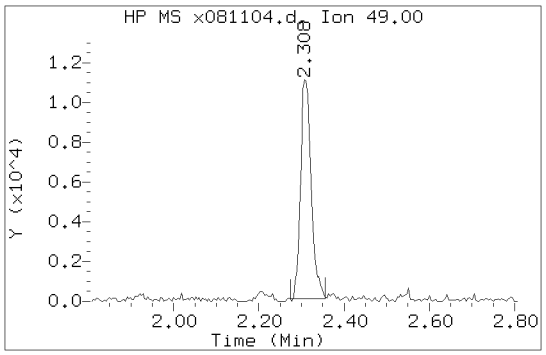
BEFORE

MASS
49
AREA
19320
HEIGHT
11010
12-Aug-2023
22:50



AFTER

MASS
49
AREA
19320
HEIGHT
11010
12-Aug-2023
22:50



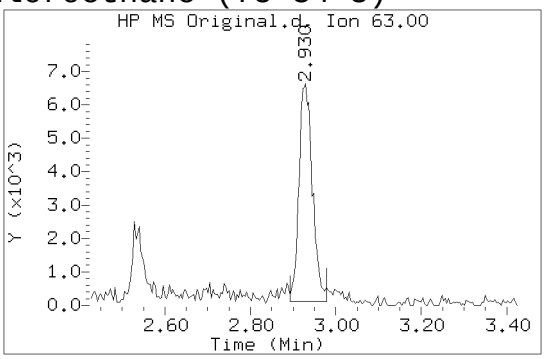
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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

1,1-Dichloroethane (75-34-3)

Reason Code:

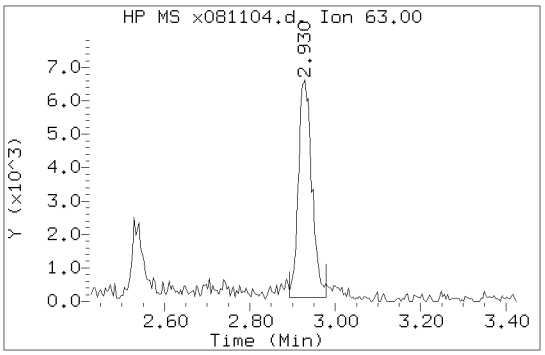
BEFORE

MASS
63
AREA
14531
HEIGHT
6510
12-Aug-2023
22:50



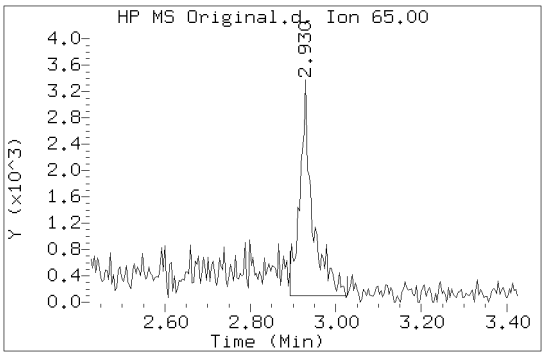
AFTER

MASS
63
AREA
14531
HEIGHT
6510
12-Aug-2023
22:50



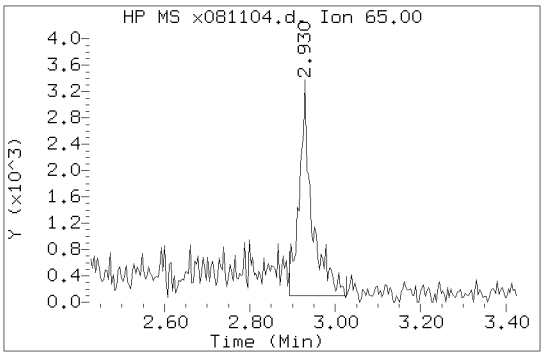
BEFORE

MASS
65
AREA
6876
HEIGHT
3277
12-Aug-2023
22:50



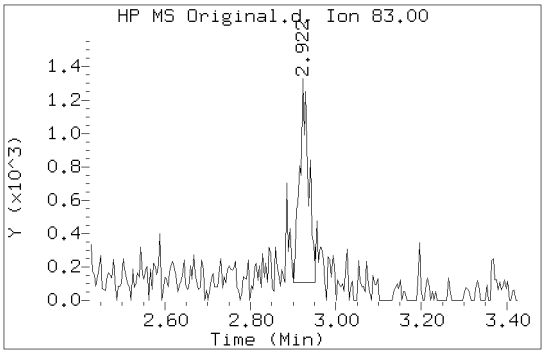
AFTER

MASS
65
AREA
6876
HEIGHT
3277
12-Aug-2023
22:50



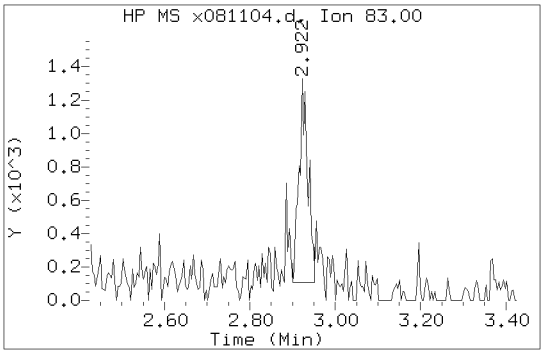
BEFORE

MASS
83
AREA
1806
HEIGHT
1219
12-Aug-2023
22:50



AFTER

MASS
83
AREA
1806
HEIGHT
1219
12-Aug-2023
22:50

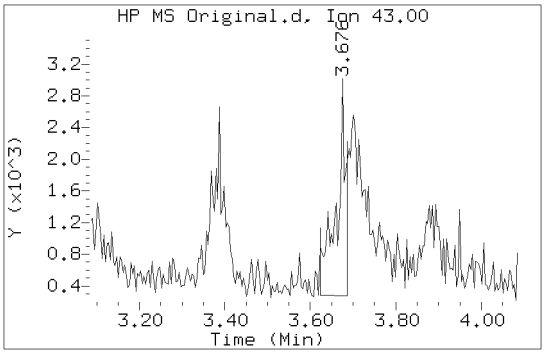


2-Butanone (78-93-3)

Reason Code:

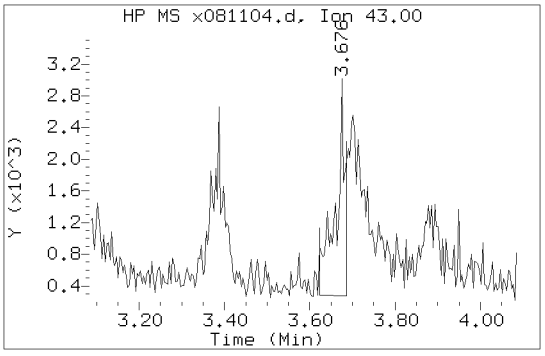
BEFORE

MASS
43
AREA
4169
HEIGHT
2738
12-Aug-2023
22:50



AFTER

MASS
43
AREA
4169
HEIGHT
2738
12-Aug-2023
22:50

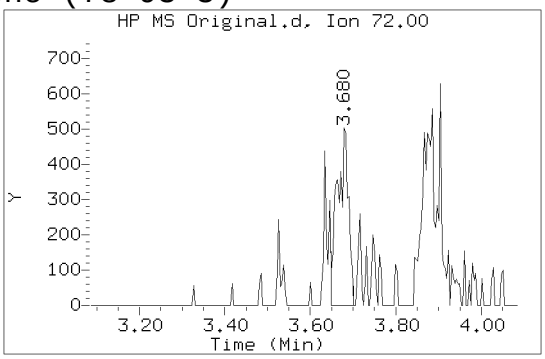


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LabSampID : VSTD001

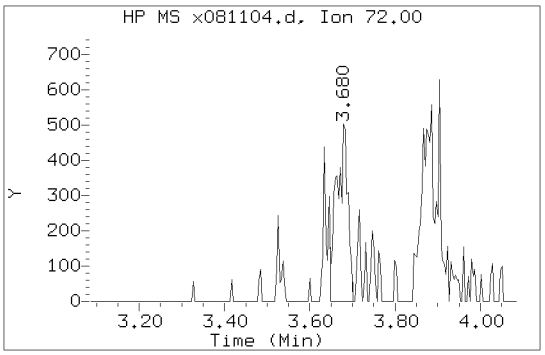
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
72
AREA
918
HEIGHT
503
12-Aug-2023
22:50



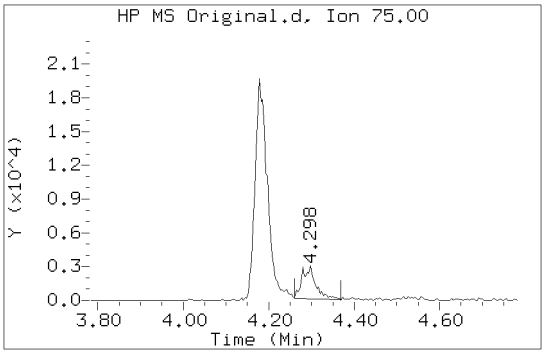
AFTER
MASS
72
AREA
918
HEIGHT
503
12-Aug-2023
22:50



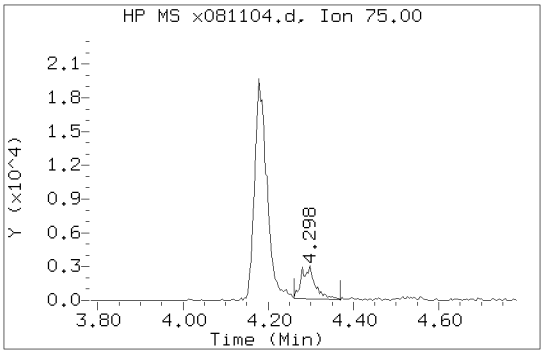
1,1-Dichloropropene (563-58-6)

Reason Code:

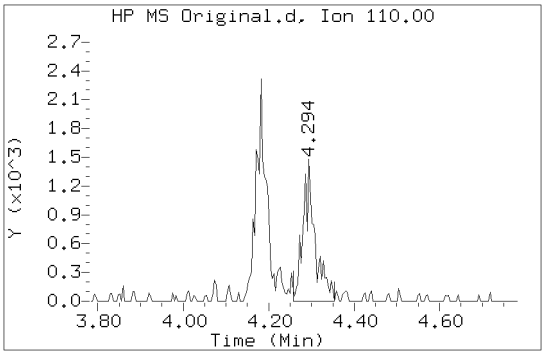
BEFORE
MASS
75
AREA
6485
HEIGHT
2955
12-Aug-2023
22:50



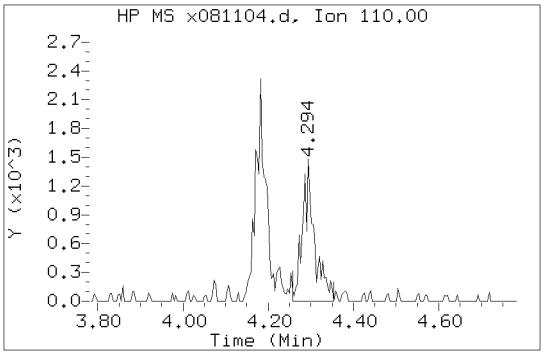
AFTER
MASS
75
AREA
6485
HEIGHT
2955
12-Aug-2023
22:50



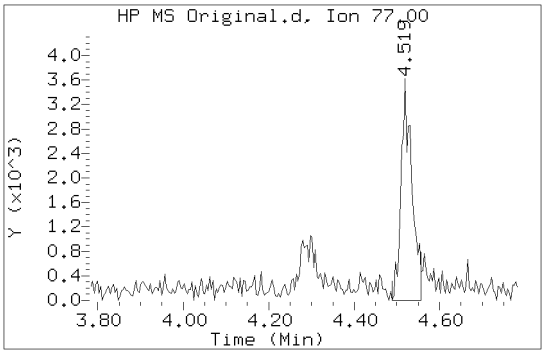
BEFORE
MASS
110
AREA
2897
HEIGHT
1478
12-Aug-2023
22:50



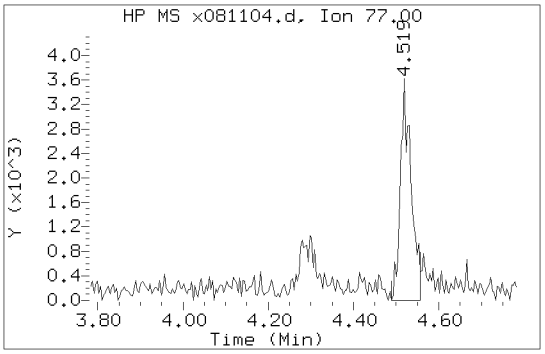
AFTER
MASS
110
AREA
2897
HEIGHT
1478
12-Aug-2023
22:50



BEFORE
MASS
77
AREA
6360
HEIGHT
3621
12-Aug-2023
22:50



AFTER
MASS
77
AREA
6360
HEIGHT
3621
12-Aug-2023
22:50

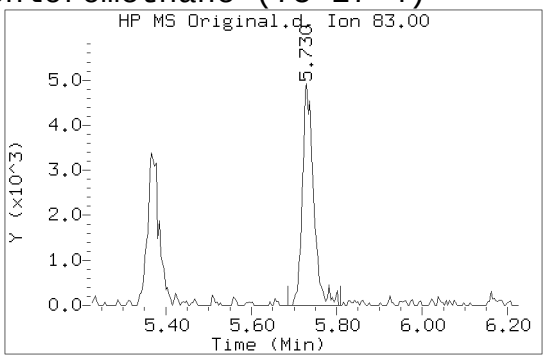


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LabSampID : VSTD001

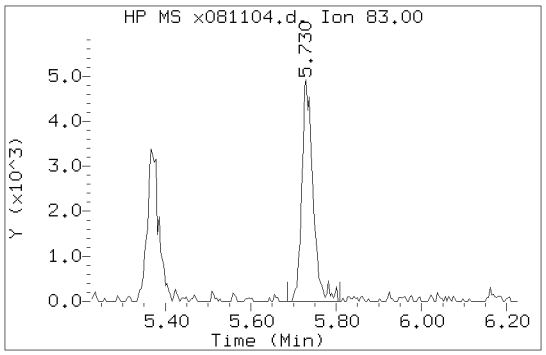
Bromodichloromethane (75-27-4)

Reason Code:

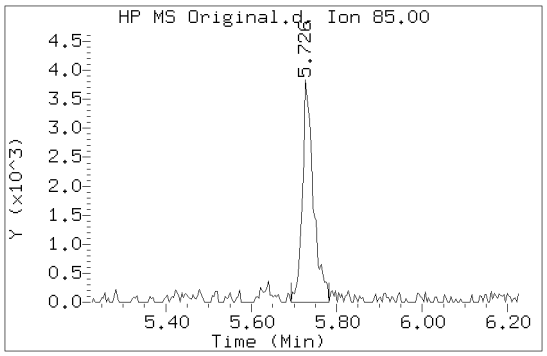
BEFORE
MASS
83
AREA
9159
HEIGHT
4921
12-Aug-2023
22:50



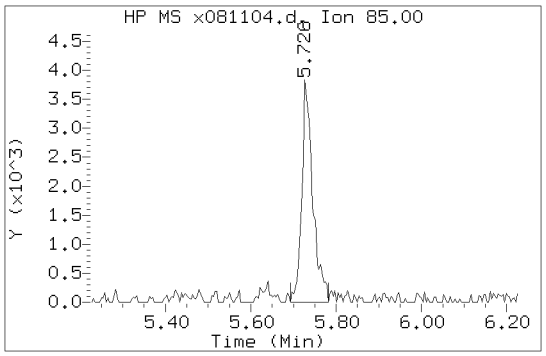
AFTER
MASS
83
AREA
9159
HEIGHT
4921
12-Aug-2023
22:50



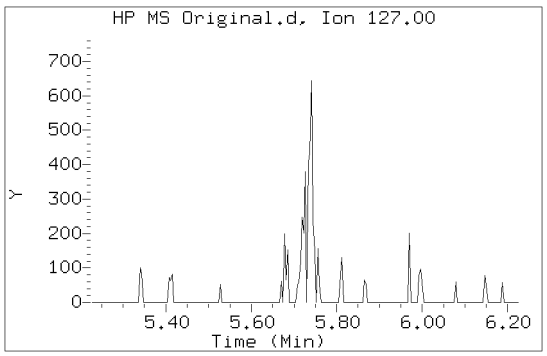
BEFORE
MASS
85
AREA
7009
HEIGHT
3834
12-Aug-2023
22:50



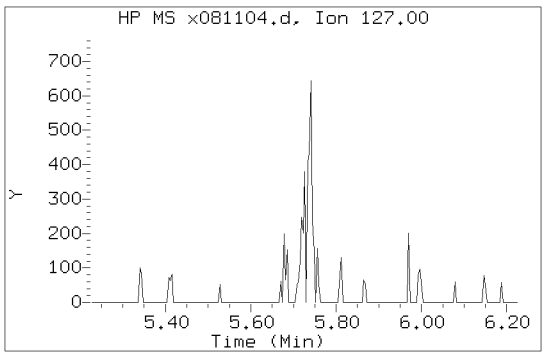
AFTER
MASS
85
AREA
7009
HEIGHT
3834
12-Aug-2023
22:50



BEFORE
MASS
127
AREA
0
HEIGHT
0
12-Aug-2023
22:50



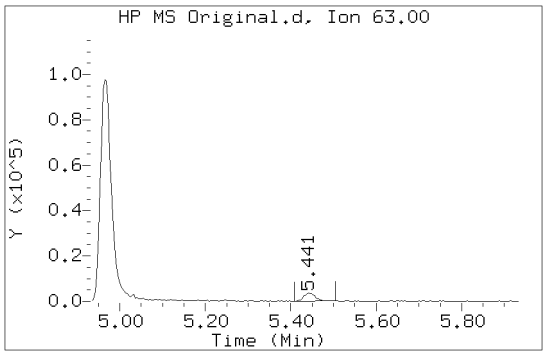
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Aug-2023
22:50



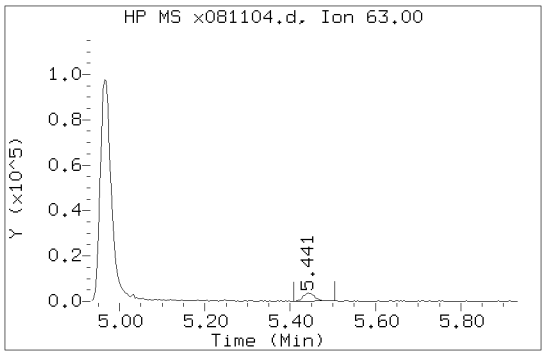
1,2-Dichloropropane (78-87-5)

Reason Code:

BEFORE
MASS
63
AREA
6642
HEIGHT
3674
12-Aug-2023
22:50



AFTER
MASS
63
AREA
6642
HEIGHT
3674
12-Aug-2023
22:50

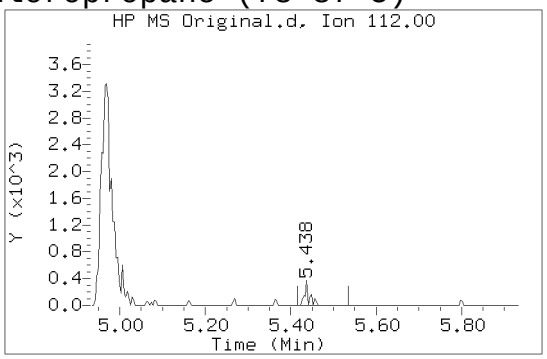


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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

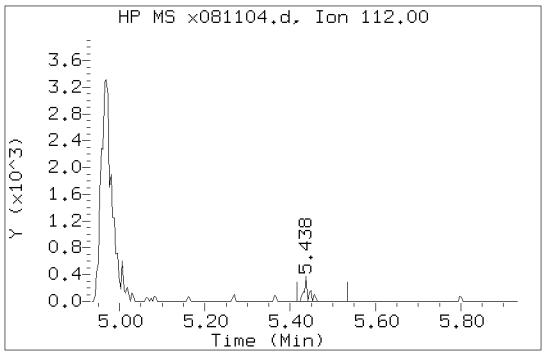
1,2-Dichloropropane (78-87-5)

Reason Code:

BEFORE
MASS
112
AREA
266
HEIGHT
371
12-Aug-2023
22:50



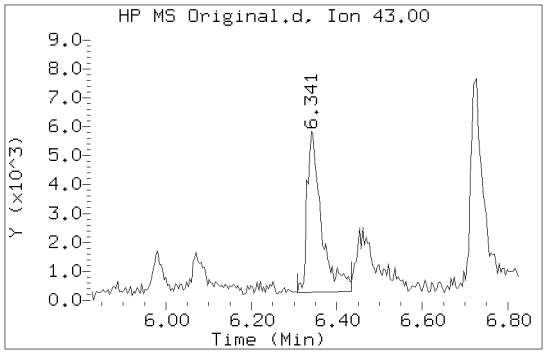
AFTER
MASS
112
AREA
266
HEIGHT
371
12-Aug-2023
22:50



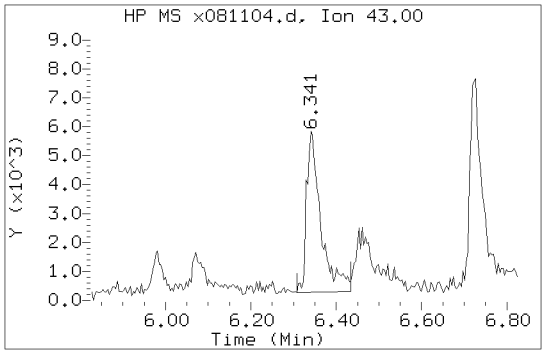
4-Methyl-2-Pentanone (108-10-1)

Reason Code:

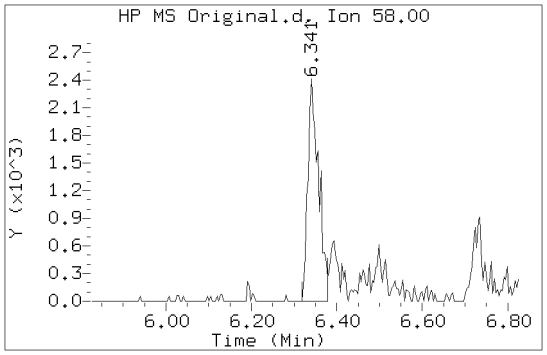
BEFORE
MASS
43
AREA
13000
HEIGHT
5556
12-Aug-2023
22:50



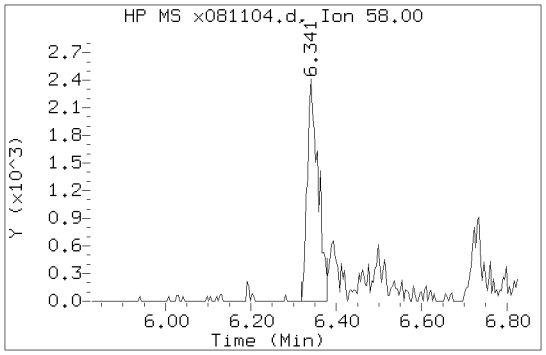
AFTER
MASS
43
AREA
13000
HEIGHT
5556
12-Aug-2023
22:50



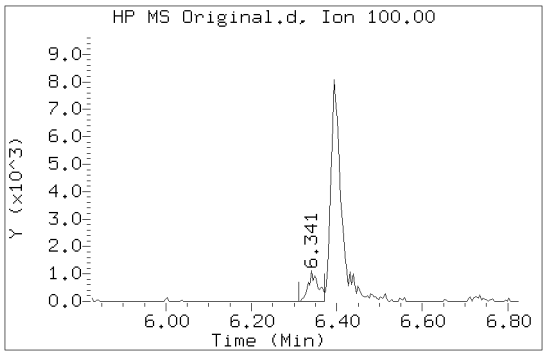
BEFORE
MASS
58
AREA
4257
HEIGHT
2414
12-Aug-2023
22:50



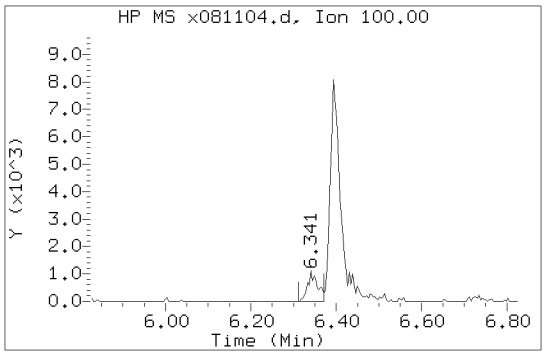
AFTER
MASS
58
AREA
4257
HEIGHT
2414
12-Aug-2023
22:50



BEFORE
MASS
100
AREA
1780
HEIGHT
1123
12-Aug-2023
22:50



AFTER
MASS
100
AREA
1780
HEIGHT
1123
12-Aug-2023
22:50

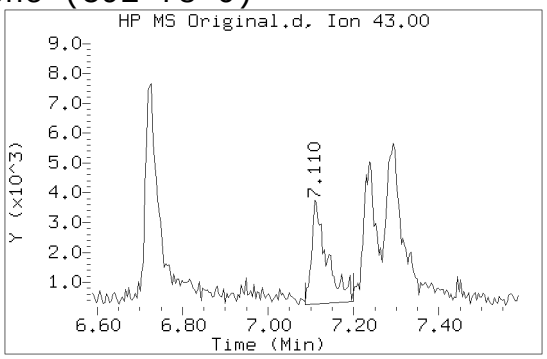


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LabSampID : VSTD001

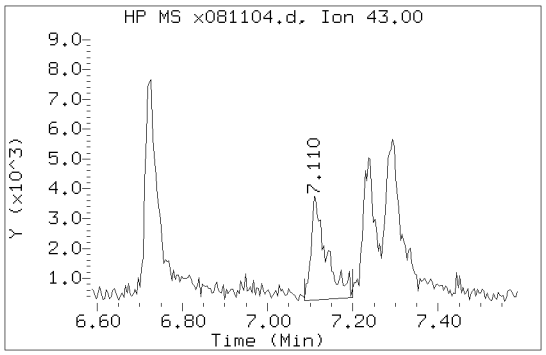
2-Hexanone (591-78-6)

Reason Code:

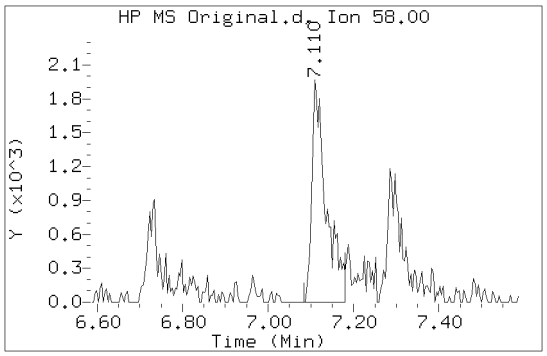
BEFORE
MASS
43
AREA
8658
HEIGHT
3477
12-Aug-2023
22:50



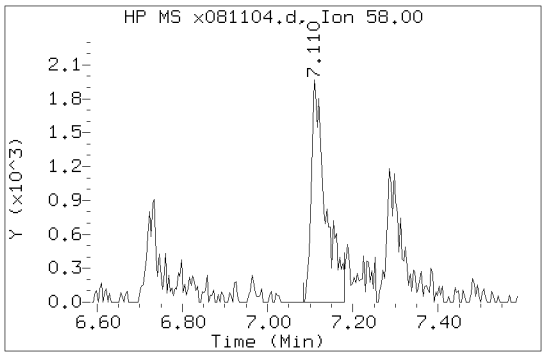
AFTER
MASS
43
AREA
8658
HEIGHT
3477
12-Aug-2023
22:50



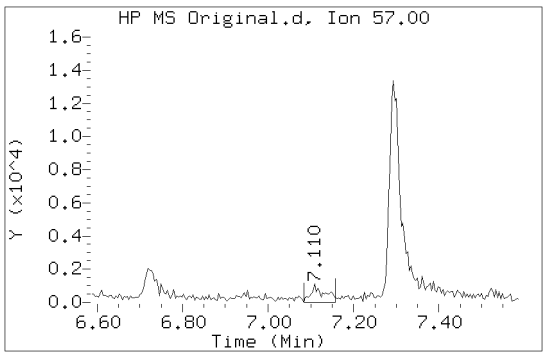
BEFORE
MASS
58
AREA
4573
HEIGHT
1967
12-Aug-2023
22:50



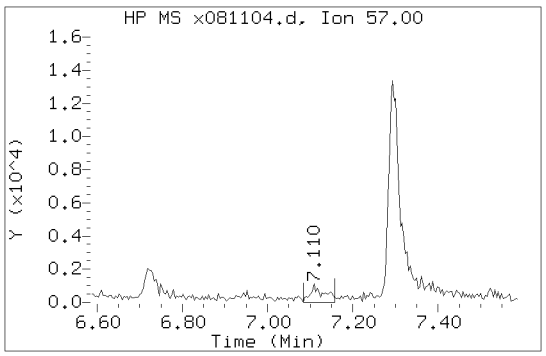
AFTER
MASS
58
AREA
4573
HEIGHT
1967
12-Aug-2023
22:50



BEFORE
MASS
57
AREA
2385
HEIGHT
1109
12-Aug-2023
22:50



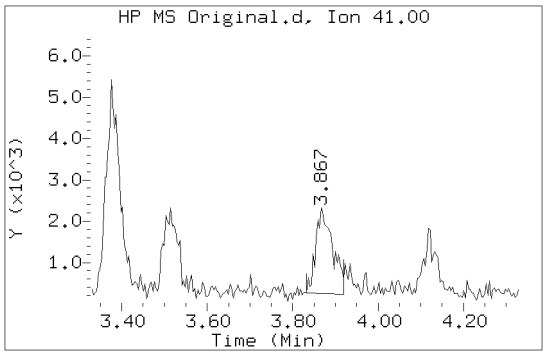
AFTER
MASS
57
AREA
2385
HEIGHT
1109
12-Aug-2023
22:50



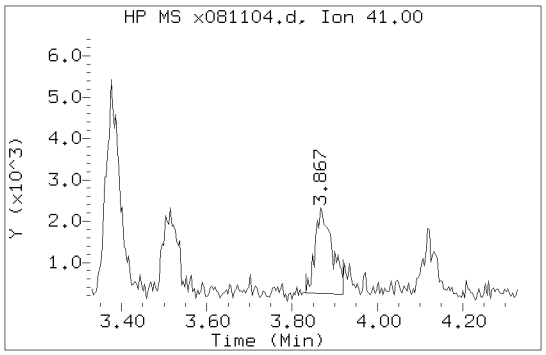
Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
MASS
41
AREA
5673
HEIGHT
2076
12-Aug-2023
22:50



AFTER
MASS
41
AREA
5673
HEIGHT
2076
12-Aug-2023
22:50

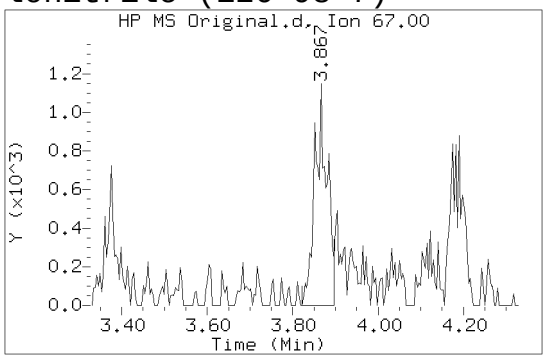


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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

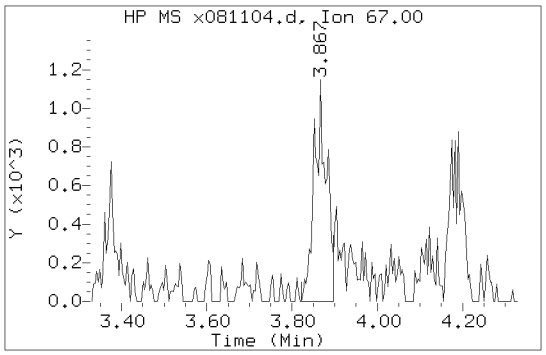
Methacrylonitrile (126-98-7)

Reason Code:

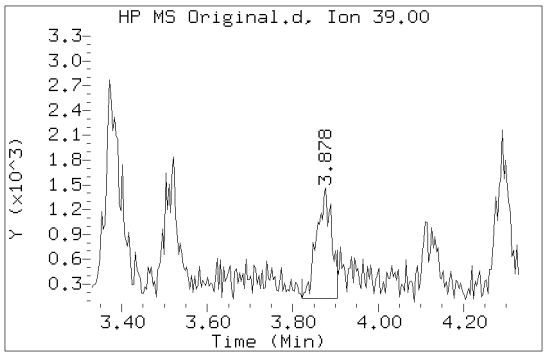
BEFORE
MASS
67
AREA
2280
HEIGHT
1148
12-Aug-2023
22:50



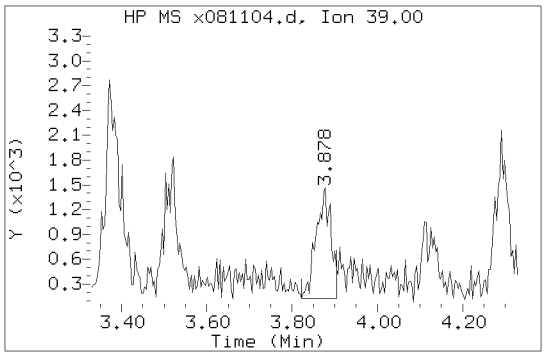
AFTER
MASS
67
AREA
2280
HEIGHT
1148
12-Aug-2023
22:50



BEFORE
MASS
39
AREA
3209
HEIGHT
1333
12-Aug-2023
22:50



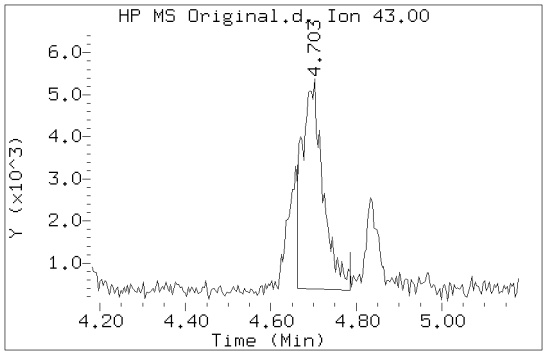
AFTER
MASS
39
AREA
3209
HEIGHT
1333
12-Aug-2023
22:50



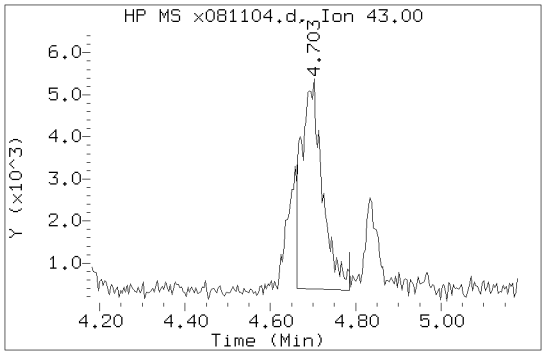
Isobutyl Alcohol (78-83-1)

Reason Code:

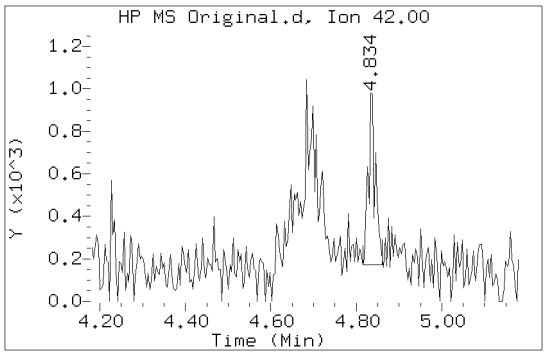
BEFORE
MASS
43
AREA
17428
HEIGHT
4985
12-Aug-2023
22:50



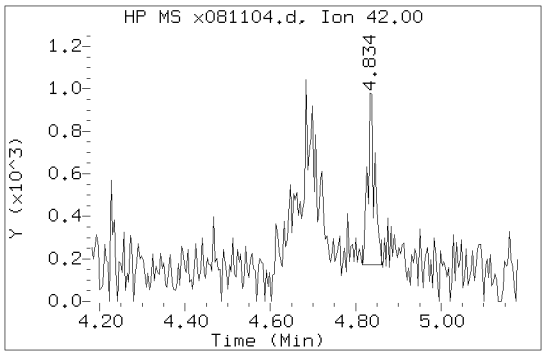
AFTER
MASS
43
AREA
17428
HEIGHT
4985
12-Aug-2023
22:50



BEFORE
MASS
42
AREA
911
HEIGHT
807
12-Aug-2023
22:50



AFTER
MASS
42
AREA
911
HEIGHT
807
12-Aug-2023
22:50



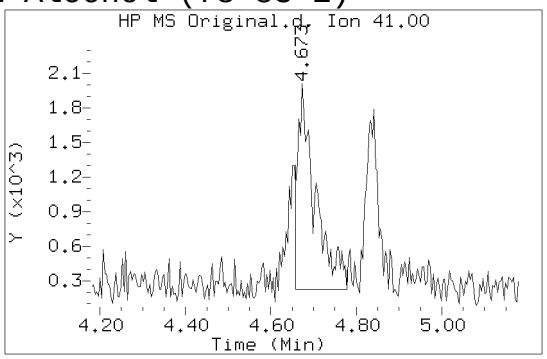
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InstruID : voa6.i
LabSampID : VSTD001

Isobutyl Alcohol (78-83-1)

Reason Code:

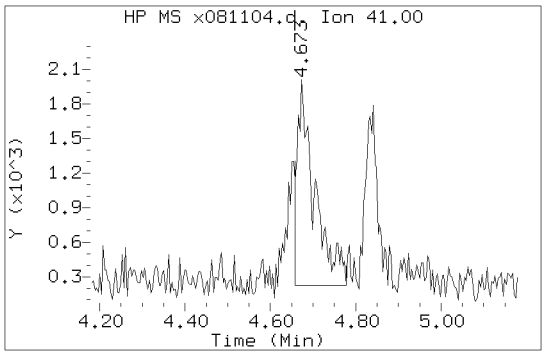
BEFORE

MASS
41
AREA
5118
HEIGHT
1787
12-Aug-2023
22:50



AFTER

MASS
41
AREA
5118
HEIGHT
1787
12-Aug-2023
22:50

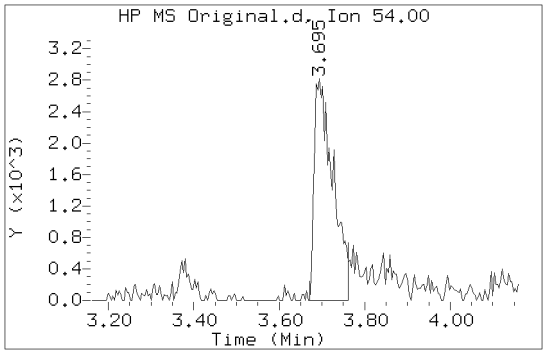


Propionitrile (107-12-0)

Reason Code:

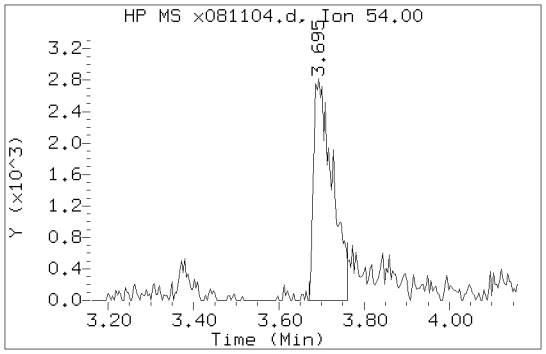
BEFORE

MASS
54
AREA
8585
HEIGHT
2819
12-Aug-2023
22:50



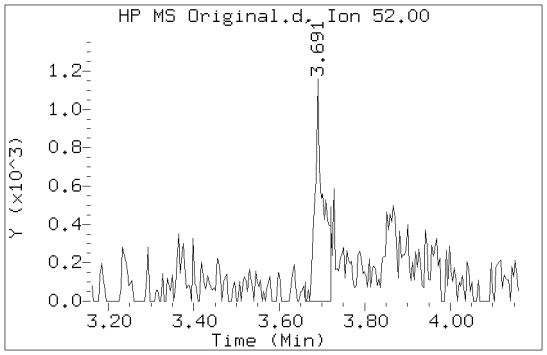
AFTER

MASS
54
AREA
8585
HEIGHT
2819
12-Aug-2023
22:50



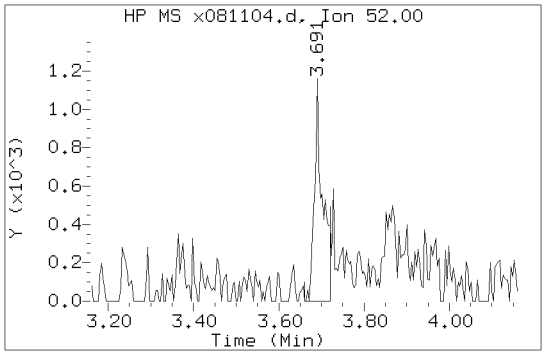
BEFORE

MASS
52
AREA
1544
HEIGHT
1159
12-Aug-2023
22:50



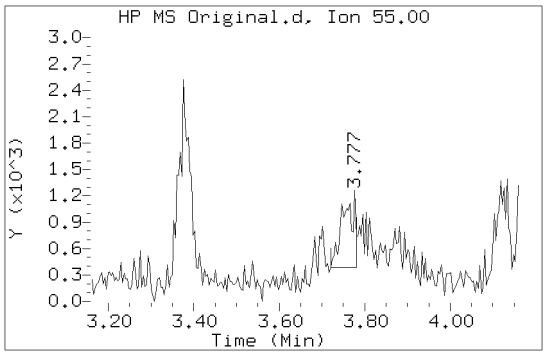
AFTER

MASS
52
AREA
1544
HEIGHT
1159
12-Aug-2023
22:50



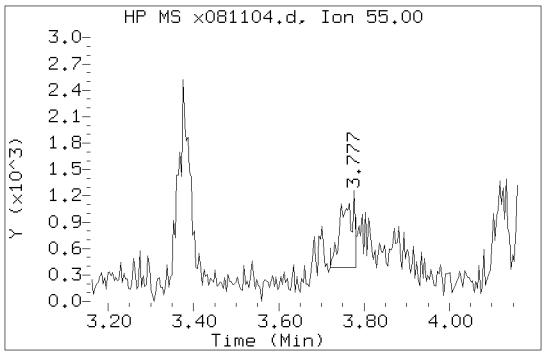
BEFORE

MASS
55
AREA
1660
HEIGHT
874
12-Aug-2023
22:50



AFTER

MASS
55
AREA
1660
HEIGHT
874
12-Aug-2023
22:50

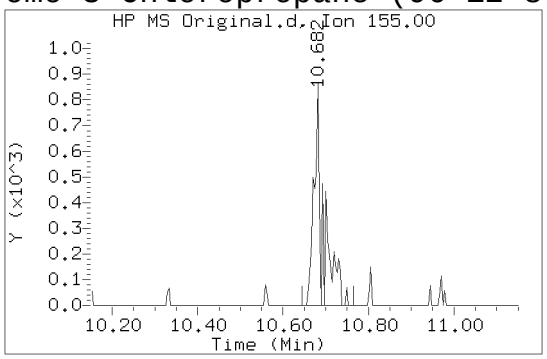


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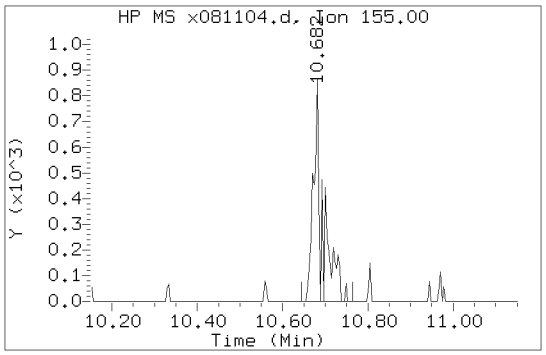
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

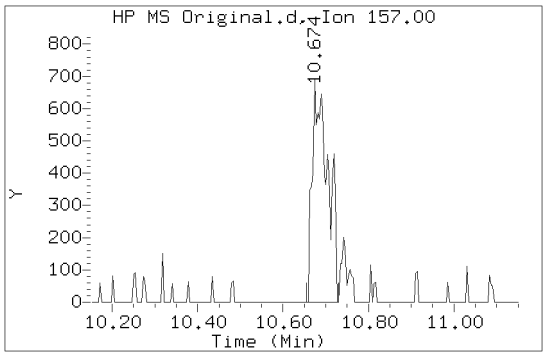
BEFORE
MASS
155
AREA
1274
HEIGHT
863
12-Aug-2023
22:50



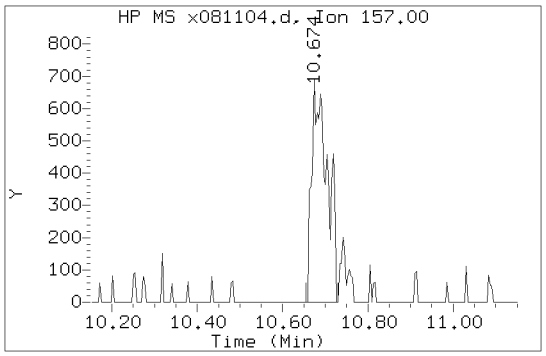
AFTER
MASS
155
AREA
1274
HEIGHT
863
12-Aug-2023
22:50



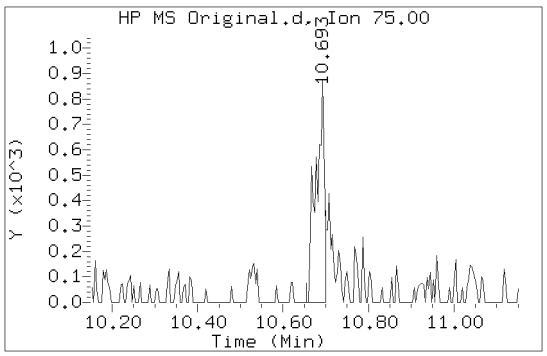
BEFORE
MASS
157
AREA
1735
HEIGHT
689
12-Aug-2023
22:50



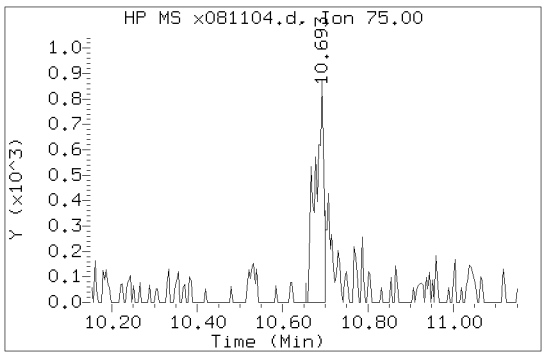
AFTER
MASS
157
AREA
1735
HEIGHT
689
12-Aug-2023
22:50



BEFORE
MASS
75
AREA
1196
HEIGHT
872
12-Aug-2023
22:50



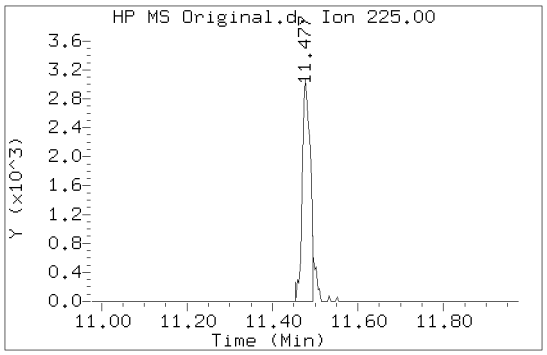
AFTER
MASS
75
AREA
1196
HEIGHT
872
12-Aug-2023
22:50



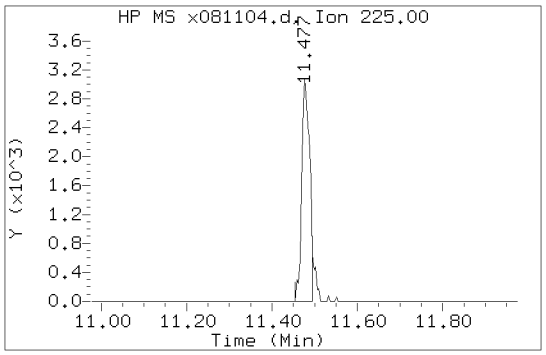
Hexachlorobutadiene (87-68-3)

Reason Code:

BEFORE
MASS
225
AREA
4132
HEIGHT
3064
12-Aug-2023
22:50



AFTER
MASS
225
AREA
4132
HEIGHT
3064
12-Aug-2023
22:50

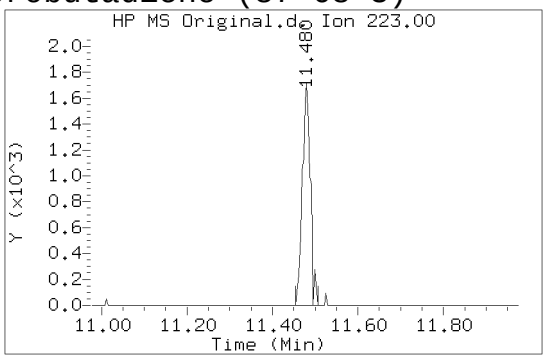


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InstruID : voa6.i
LabSampID : VSTD001

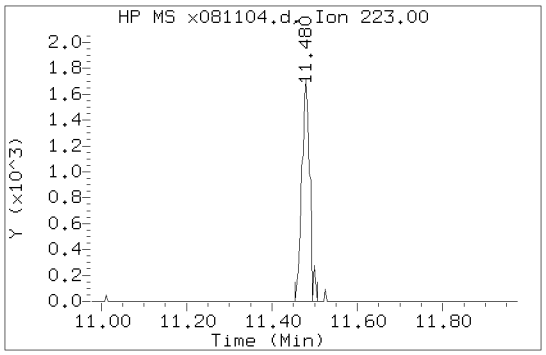
Hexachlorobutadiene (87-68-3)

Reason Code:

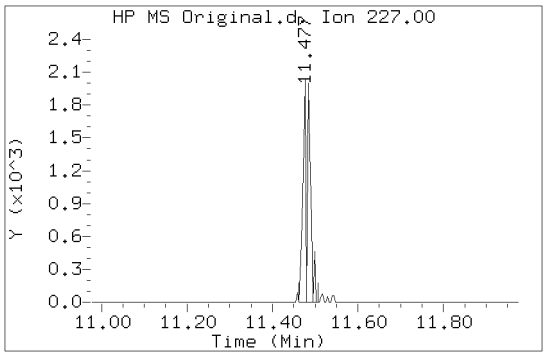
BEFORE
MASS
223
AREA
2286
HEIGHT
1712
12-Aug-2023
22:50



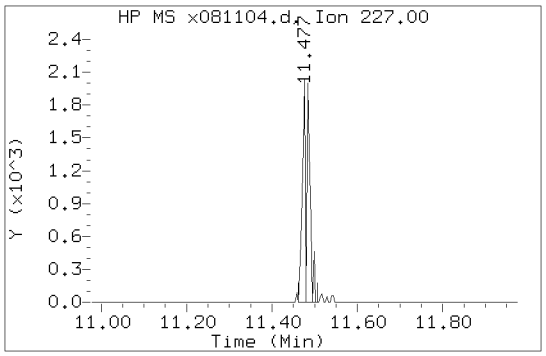
AFTER
MASS
223
AREA
2286
HEIGHT
1712
12-Aug-2023
22:50



BEFORE
MASS
227
AREA
2066
HEIGHT
2030
12-Aug-2023
22:50



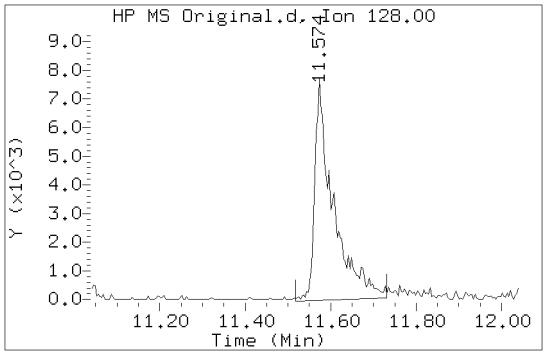
AFTER
MASS
227
AREA
2066
HEIGHT
2030
12-Aug-2023
22:50



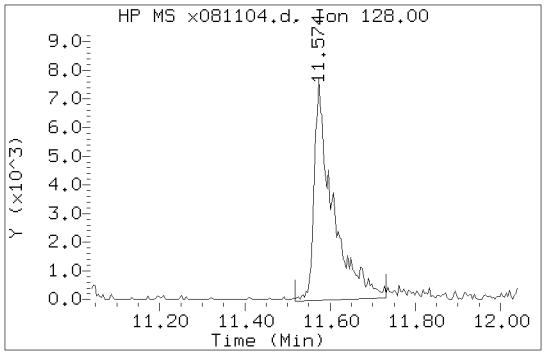
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
128
AREA
23210
HEIGHT
7730
12-Aug-2023
22:50



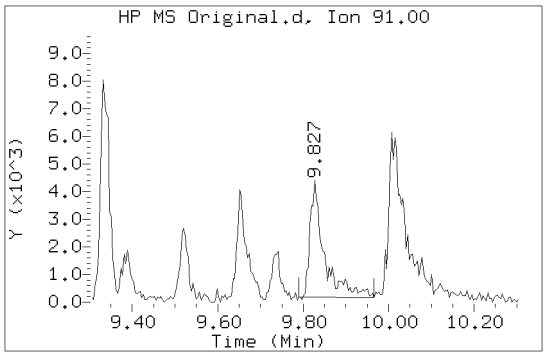
AFTER
MASS
128
AREA
23210
HEIGHT
7730
12-Aug-2023
22:50



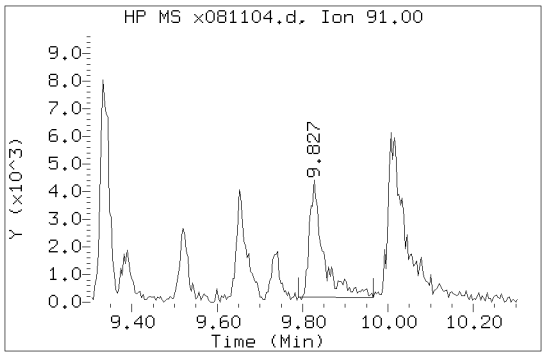
Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
9809
HEIGHT
4242
12-Aug-2023
22:50



AFTER
MASS
91
AREA
9809
HEIGHT
4242
12-Aug-2023
22:50

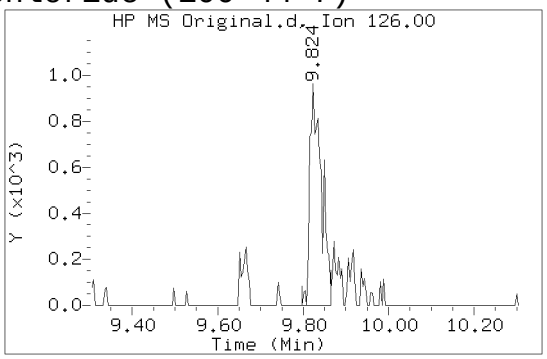


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InstruID : voa6.i
LabSampID : VSTD001

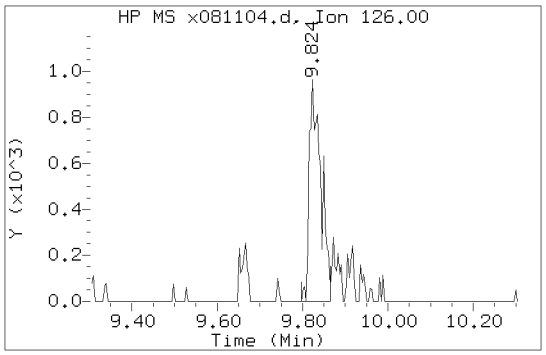
Benzyl Chloride (100-44-7)

Reason Code:

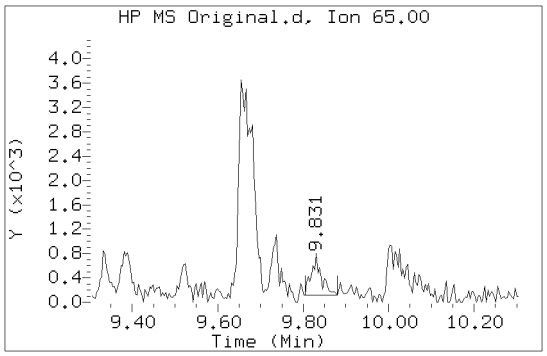
BEFORE
MASS
126
AREA
1816
HEIGHT
964
12-Aug-2023
22:50



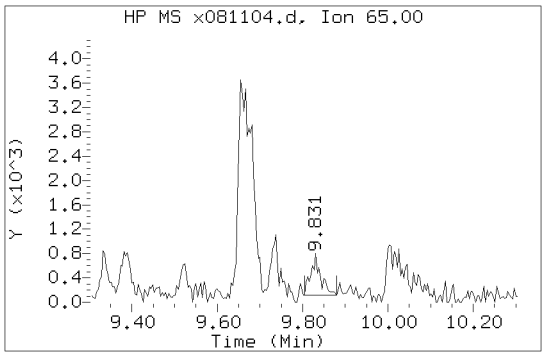
AFTER
MASS
126
AREA
1816
HEIGHT
964
12-Aug-2023
22:50



BEFORE
MASS
65
AREA
1092
HEIGHT
688
12-Aug-2023
22:50



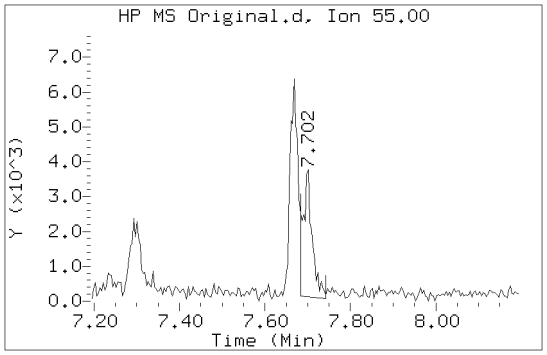
AFTER
MASS
65
AREA
1092
HEIGHT
688
12-Aug-2023
22:50



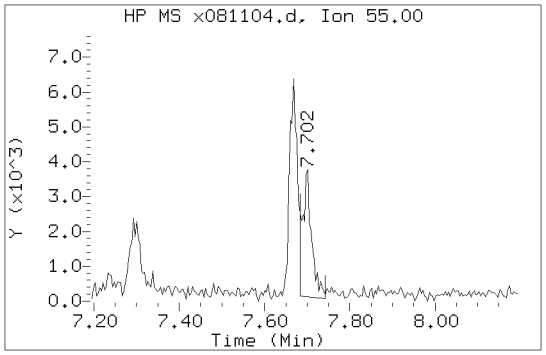
1-Chlorohexane (544-10-5)

Reason Code:

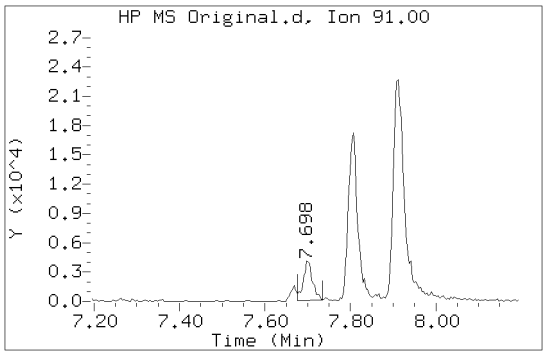
BEFORE
MASS
55
AREA
5712
HEIGHT
3660
12-Aug-2023
22:50



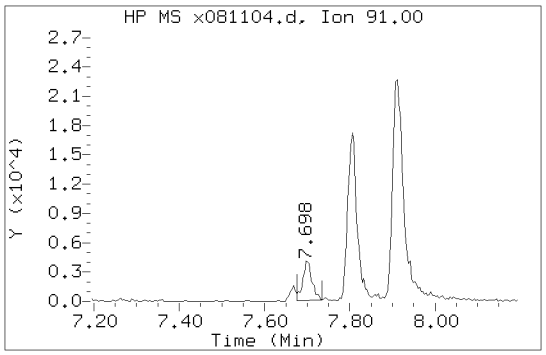
AFTER
MASS
55
AREA
5712
HEIGHT
3660
12-Aug-2023
22:50



BEFORE
MASS
91
AREA
6313
HEIGHT
4090
12-Aug-2023
22:50



AFTER
MASS
91
AREA
6313
HEIGHT
4090
12-Aug-2023
22:50

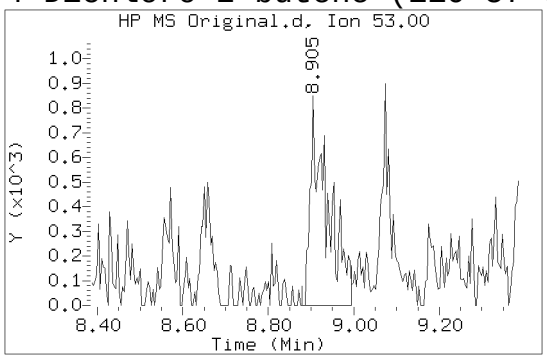


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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

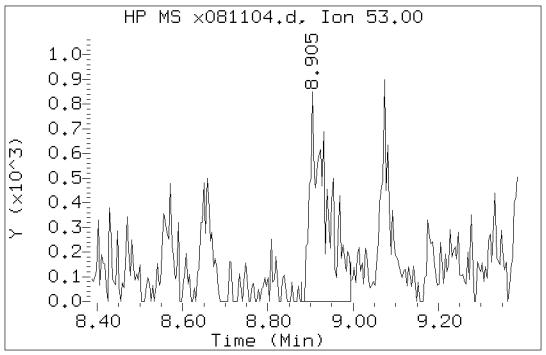
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

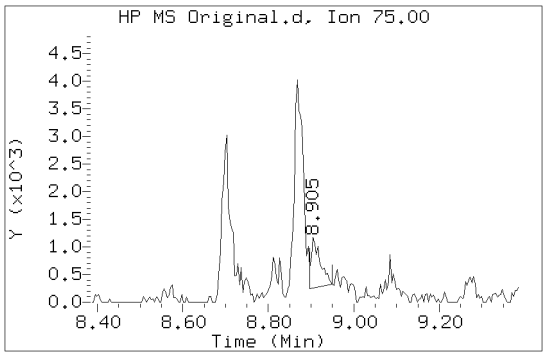
BEFORE
MASS
53
AREA
2338
HEIGHT
850
12-Aug-2023
22:50



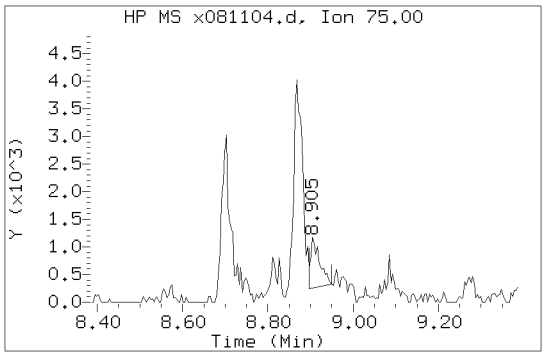
AFTER
MASS
53
AREA
2338
HEIGHT
850
12-Aug-2023
22:50



BEFORE
MASS
75
AREA
1352
HEIGHT
922
12-Aug-2023
22:50



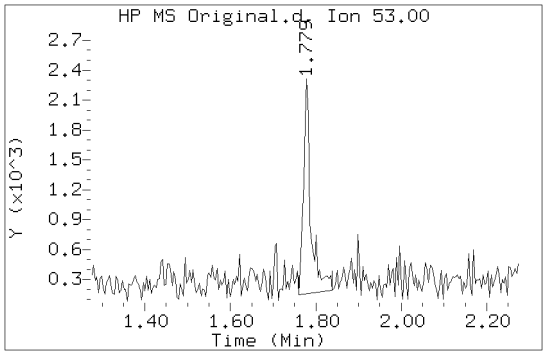
AFTER
MASS
75
AREA
1352
HEIGHT
922
12-Aug-2023
22:50



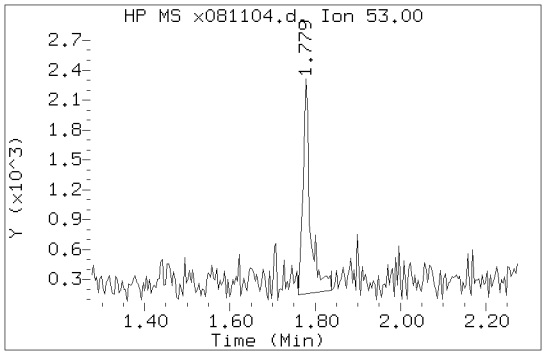
Chloroprene (126-99-8)

Reason Code:

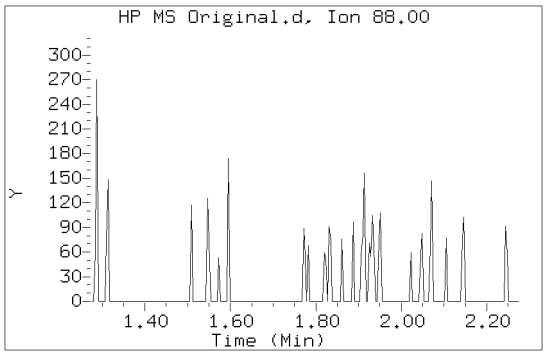
BEFORE
MASS
53
AREA
2637
HEIGHT
2155
12-Aug-2023
22:50



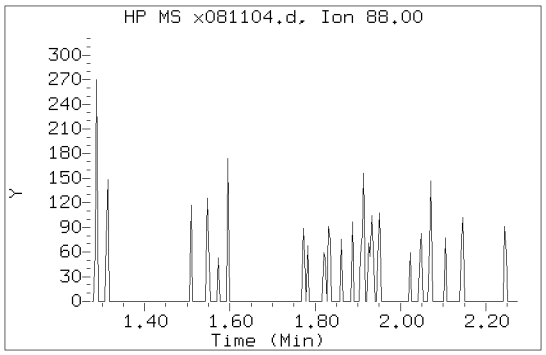
AFTER
MASS
53
AREA
2637
HEIGHT
2155
12-Aug-2023
22:50



BEFORE
MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:50



AFTER
MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:50



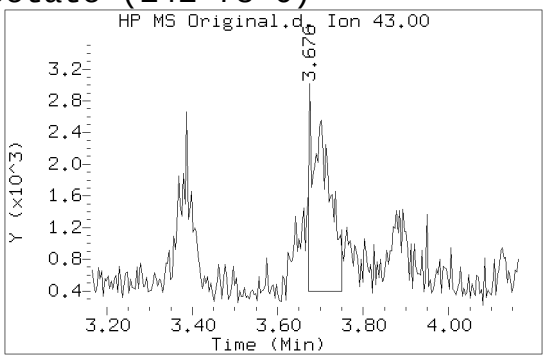
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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

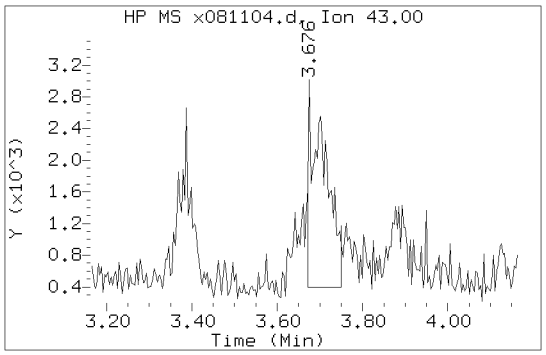
BEFORE

MASS
43
AREA
6893
HEIGHT
2620
12-Aug-2023
22:50



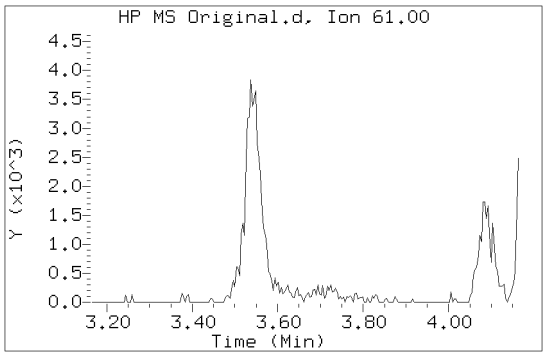
AFTER

MASS
43
AREA
6893
HEIGHT
2620
12-Aug-2023
22:50



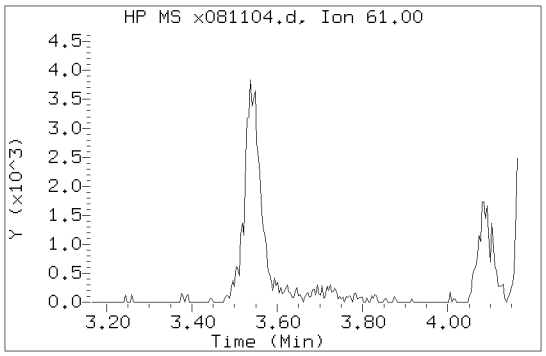
BEFORE

MASS
61
AREA
0
HEIGHT
0
12-Aug-2023
22:50



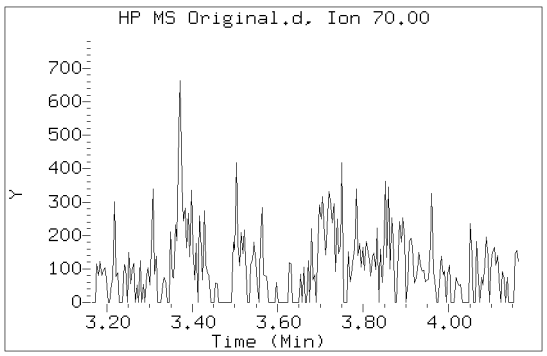
AFTER

MASS
61
AREA
0
HEIGHT
0
12-Aug-2023
22:50



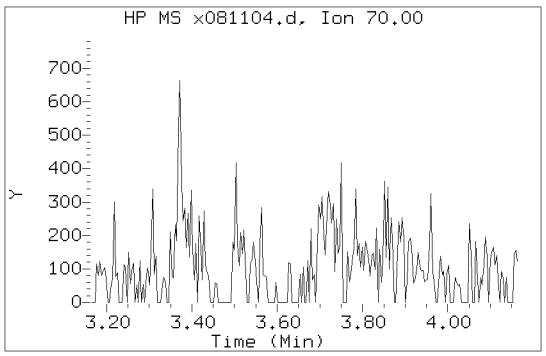
BEFORE

MASS
70
AREA
0
HEIGHT
0
12-Aug-2023
22:50



AFTER

MASS
70
AREA
0
HEIGHT
0
12-Aug-2023
22:50

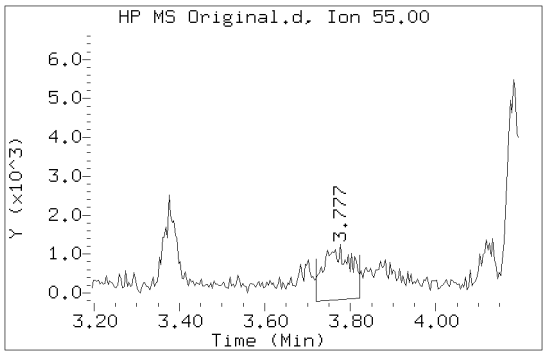


Methyl Acrylate (96-33-3)

Reason Code:

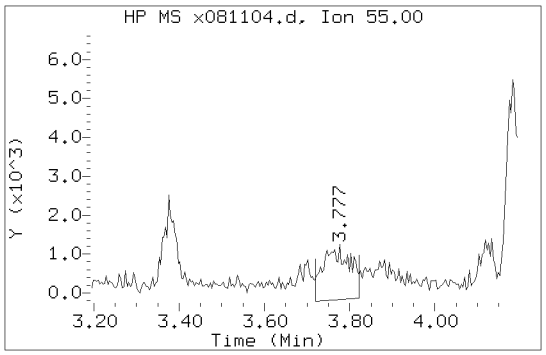
BEFORE

MASS
55
AREA
6078
HEIGHT
1428
12-Aug-2023
22:50



AFTER

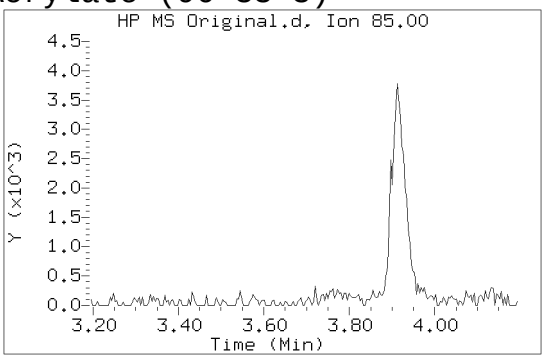
MASS
55
AREA
6078
HEIGHT
1428
12-Aug-2023
22:50



Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081104.d
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InstruID : voa6.i
LabSampID : VSTD001

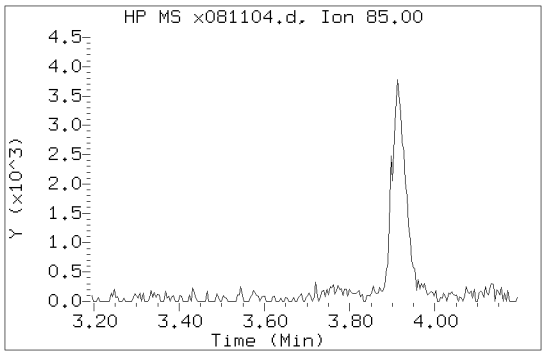
Methyl Acrylate (96-33-3)

BEFORE
MASS
85
AREA
0
HEIGHT
0
12-Aug-2023
22:50



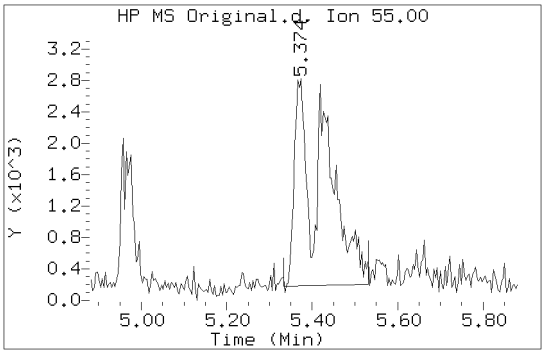
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Aug-2023
22:50

Reason Code:



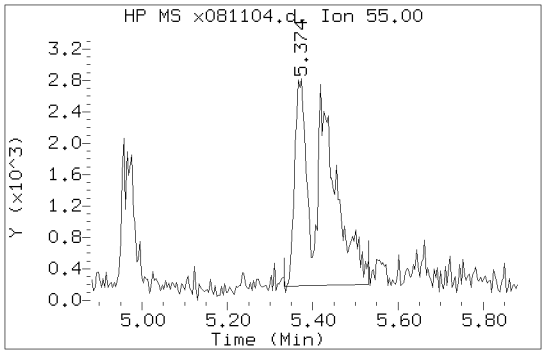
Ethyl Acrylate (140-88-5)

BEFORE
MASS
55
AREA
12771
HEIGHT
2638
12-Aug-2023
22:50

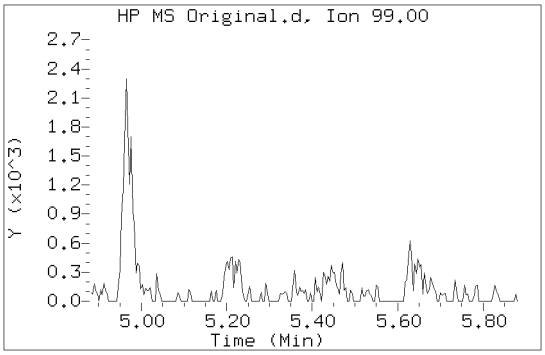


AFTER
MASS
55
AREA
12771
HEIGHT
2638
12-Aug-2023
22:50

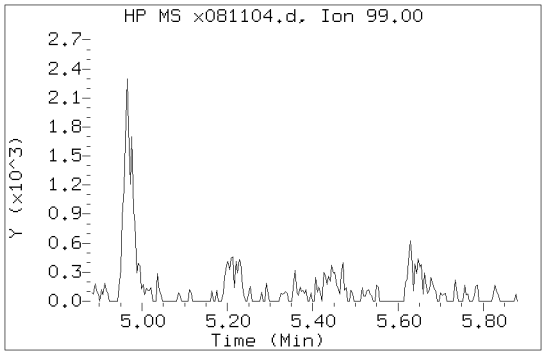
Reason Code:



BEFORE
MASS
99
AREA
0
HEIGHT
0
12-Aug-2023
22:50

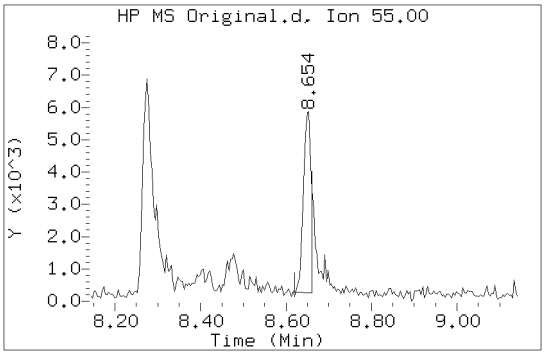


AFTER
MASS
99
AREA
0
HEIGHT
0
12-Aug-2023
22:50



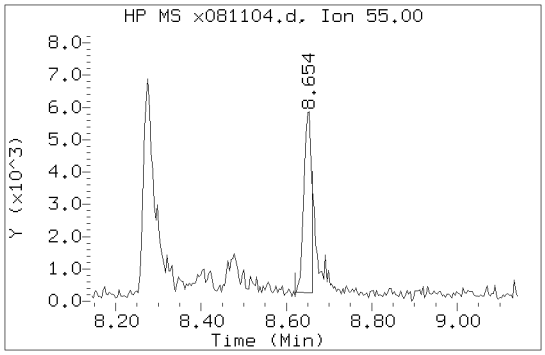
Cyclohexanone (108-94-1)

BEFORE
MASS
55
AREA
7180
HEIGHT
5609
12-Aug-2023
22:50



AFTER
MASS
55
AREA
7180
HEIGHT
5609
12-Aug-2023
22:50

Reason Code:

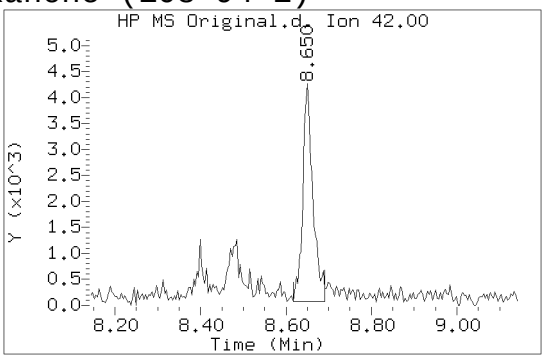


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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

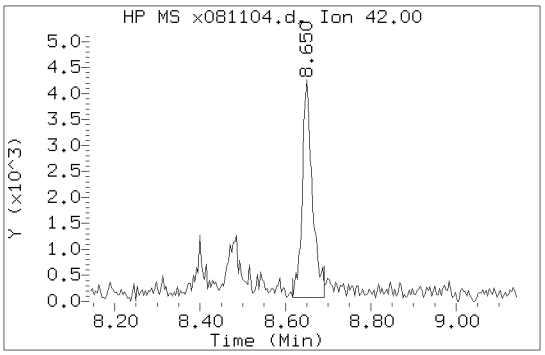
Cyclohexanone (108-94-1)

Reason Code:

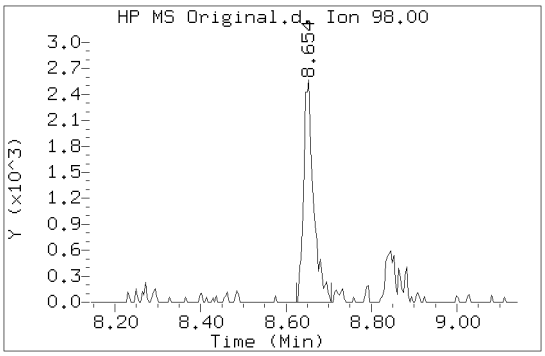
BEFORE
MASS
42
AREA
7056
HEIGHT
4197
12-Aug-2023
22:50



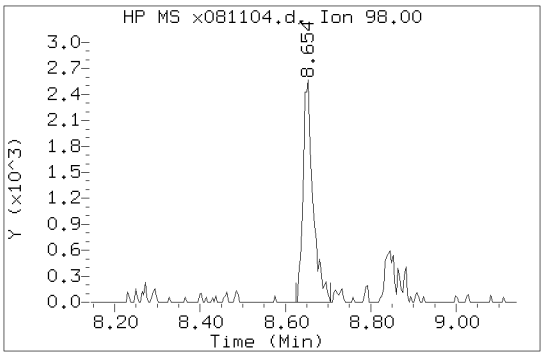
AFTER
MASS
42
AREA
7056
HEIGHT
4197
12-Aug-2023
22:50



BEFORE
MASS
98
AREA
4227
HEIGHT
2568
12-Aug-2023
22:50



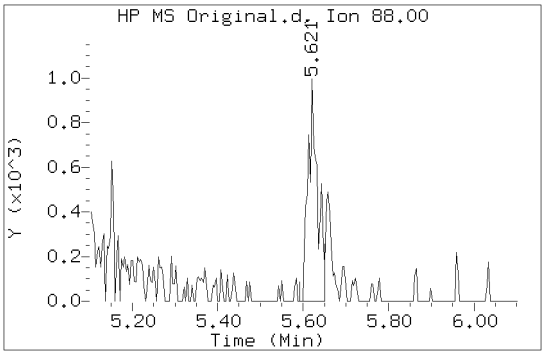
AFTER
MASS
98
AREA
4227
HEIGHT
2568
12-Aug-2023
22:50



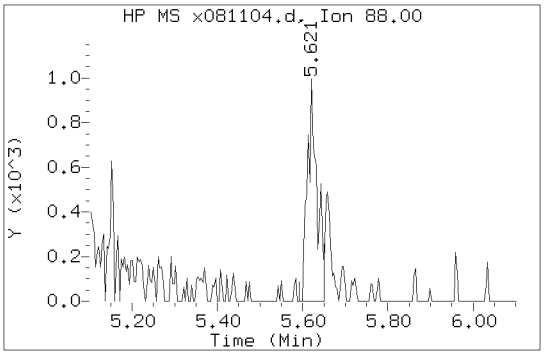
1,4-Dioxane ()

Reason Code:

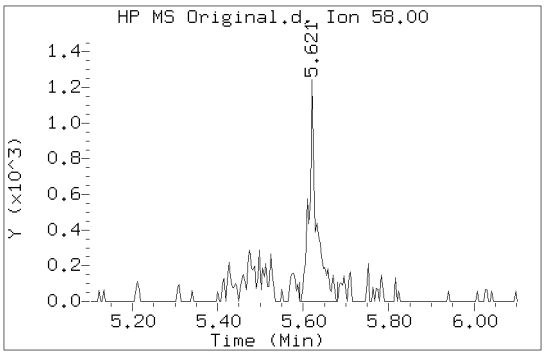
BEFORE
MASS
88
AREA
1553
HEIGHT
996
12-Aug-2023
22:50



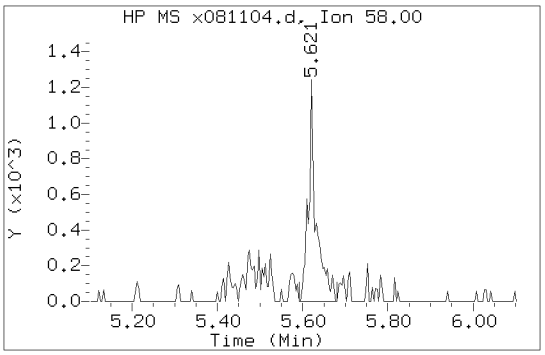
AFTER
MASS
88
AREA
1553
HEIGHT
996
12-Aug-2023
22:50



BEFORE
MASS
58
AREA
1534
HEIGHT
1243
12-Aug-2023
22:50



AFTER
MASS
58
AREA
1534
HEIGHT
1243
12-Aug-2023
22:50

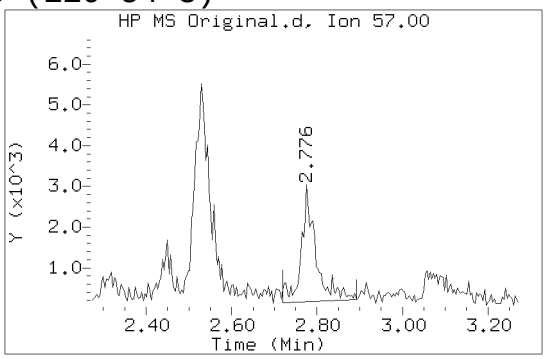


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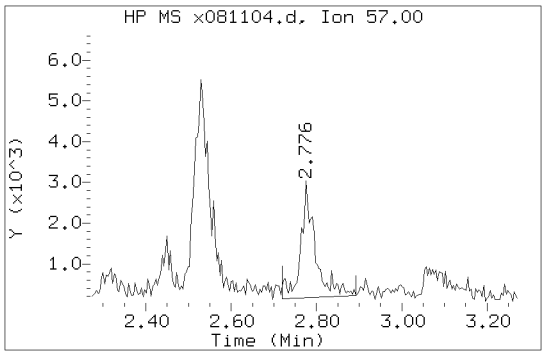
n-Hexane (110-54-3)

Reason Code:

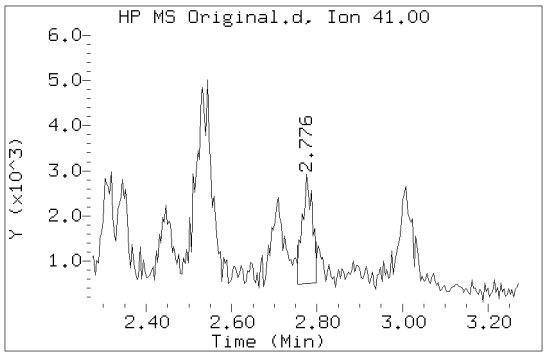
BEFORE
MASS
57
AREA
6841
HEIGHT
2866
12-Aug-2023
22:50



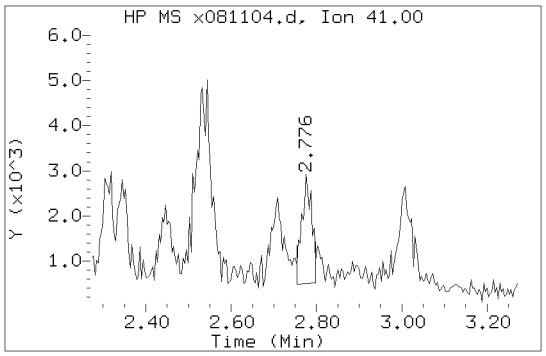
AFTER
MASS
57
AREA
6841
HEIGHT
2866
12-Aug-2023
22:50



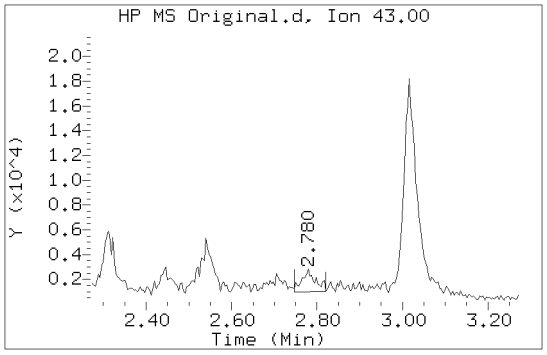
BEFORE
MASS
41
AREA
4034
HEIGHT
2416
12-Aug-2023
22:50



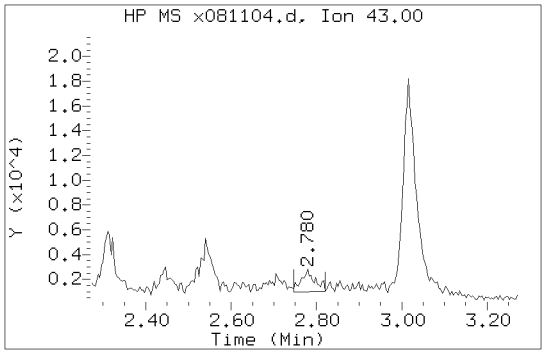
AFTER
MASS
41
AREA
4034
HEIGHT
2416
12-Aug-2023
22:50



BEFORE
MASS
43
AREA
3979
HEIGHT
1820
12-Aug-2023
22:50



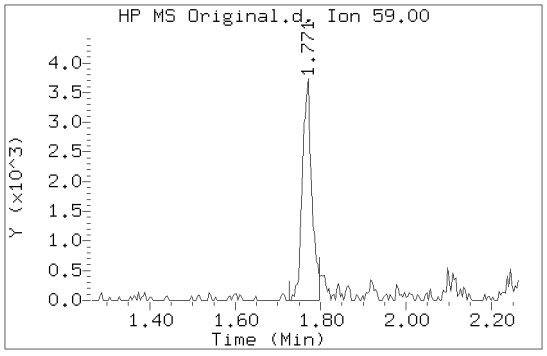
AFTER
MASS
43
AREA
3979
HEIGHT
1820
12-Aug-2023
22:50



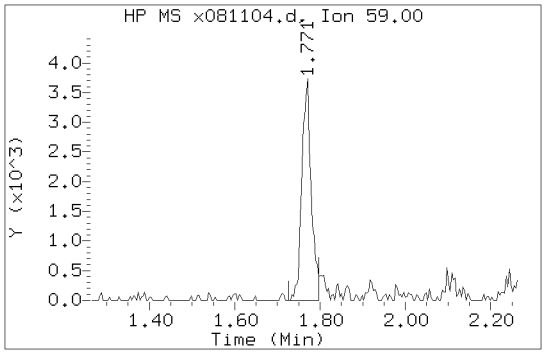
Diethyl ether (60-29-7)

Reason Code:

BEFORE
MASS
59
AREA
5859
HEIGHT
3734
12-Aug-2023
22:50



AFTER
MASS
59
AREA
5859
HEIGHT
3734
12-Aug-2023
22:50

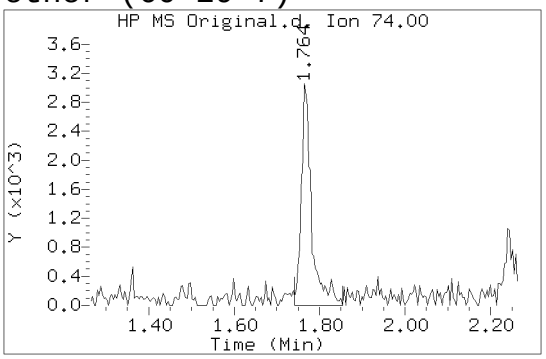


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InstruID : voa6.i
LabSampID : VSTD001

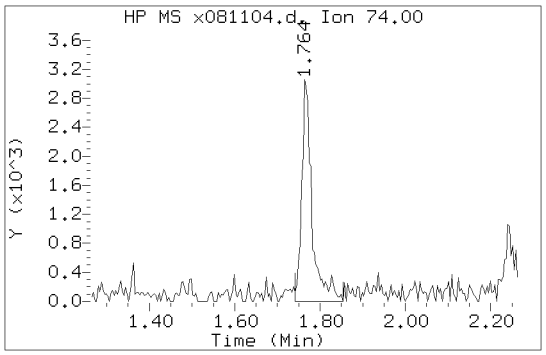
Diethyl ether (60-29-7)

Reason Code:

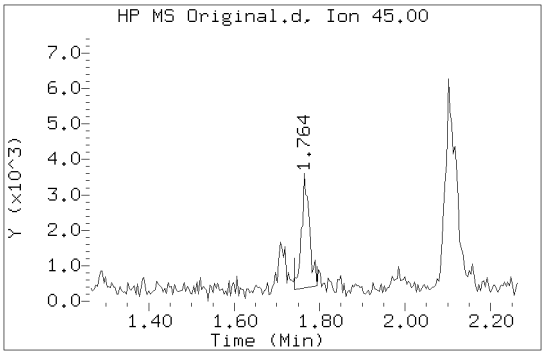
BEFORE
MASS
74
AREA
5241
HEIGHT
3056
12-Aug-2023
22:50



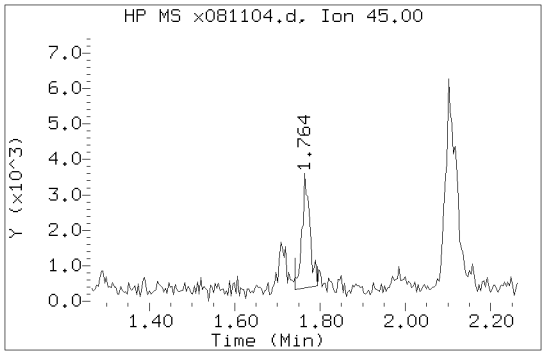
AFTER
MASS
74
AREA
5241
HEIGHT
3056
12-Aug-2023
22:50



BEFORE
MASS
45
AREA
4217
HEIGHT
3242
12-Aug-2023
22:50



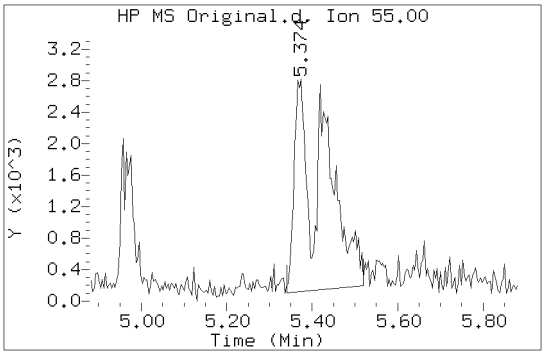
AFTER
MASS
45
AREA
4217
HEIGHT
3242
12-Aug-2023
22:50



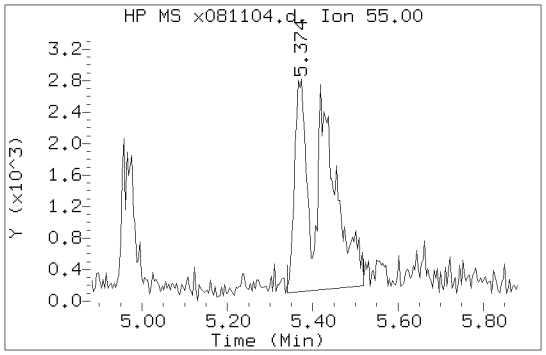
Methylcyclohexane (108-87-2)

Reason Code:

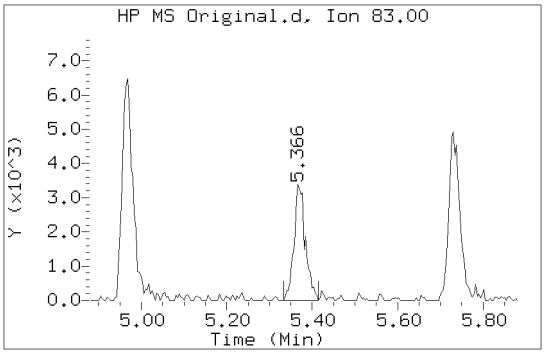
BEFORE
MASS
55
AREA
13003
HEIGHT
2701
12-Aug-2023
22:50



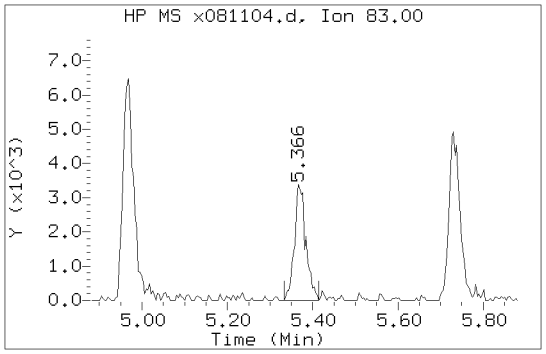
AFTER
MASS
55
AREA
13003
HEIGHT
2701
12-Aug-2023
22:50



BEFORE
MASS
83
AREA
6392
HEIGHT
3382
12-Aug-2023
22:50



AFTER
MASS
83
AREA
6392
HEIGHT
3382
12-Aug-2023
22:50

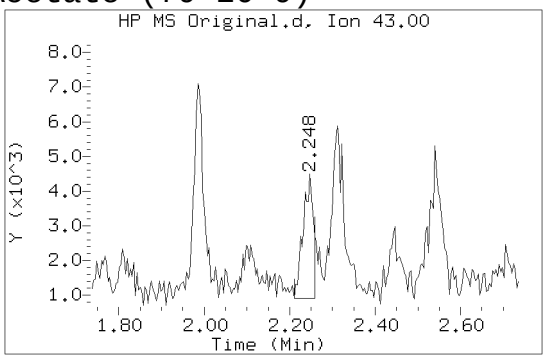


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InstruID : voa6.i
LabSampID : VSTD001

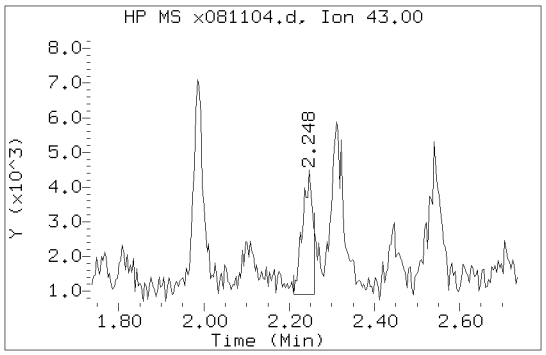
Methyl Acetate (79-20-9)

Reason Code:

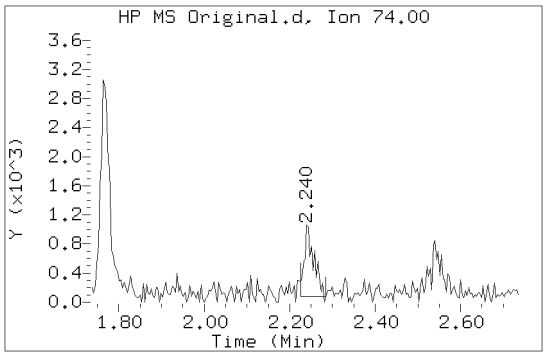
BEFORE
MASS
43
AREA
5952
HEIGHT
3593
12-Aug-2023
22:50



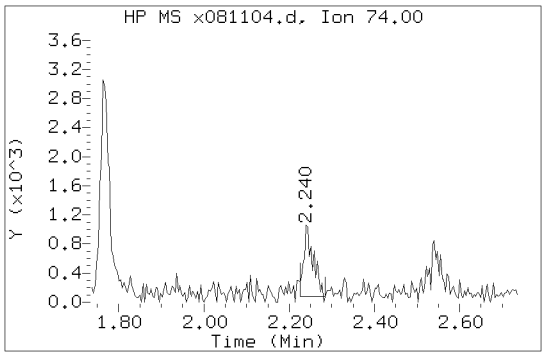
AFTER
MASS
43
AREA
5952
HEIGHT
3593
12-Aug-2023
22:50



BEFORE
MASS
74
AREA
1517
HEIGHT
975
12-Aug-2023
22:50



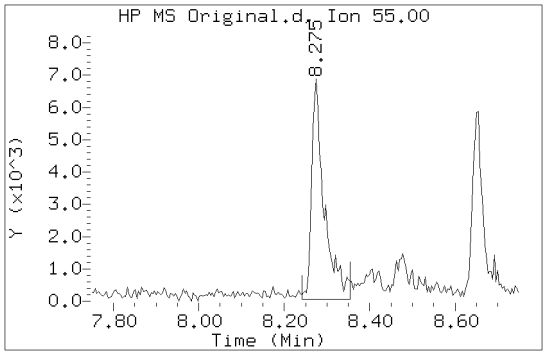
AFTER
MASS
74
AREA
1517
HEIGHT
975
12-Aug-2023
22:50



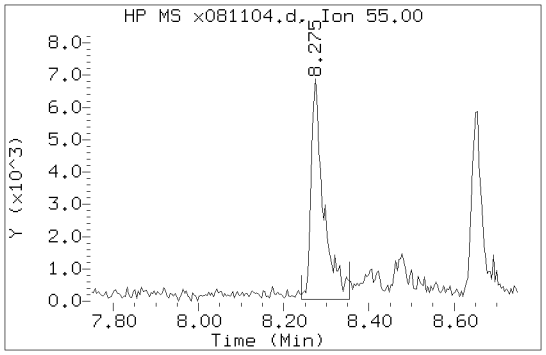
Butyl acrylate (141-32-2)

Reason Code:

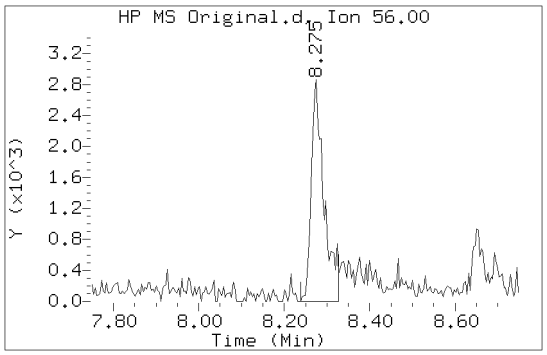
BEFORE
MASS
55
AREA
14061
HEIGHT
6826
12-Aug-2023
22:50



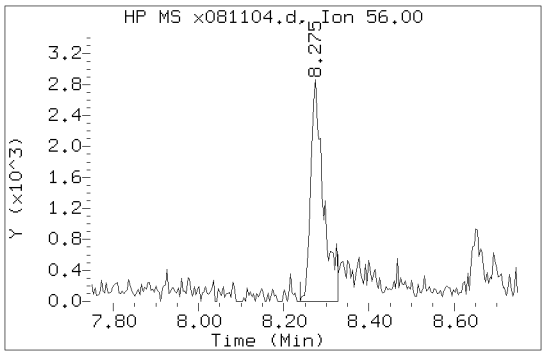
AFTER
MASS
55
AREA
14061
HEIGHT
6826
12-Aug-2023
22:50



BEFORE
MASS
56
AREA
5918
HEIGHT
2863
12-Aug-2023
22:50



AFTER
MASS
56
AREA
5918
HEIGHT
2863
12-Aug-2023
22:50



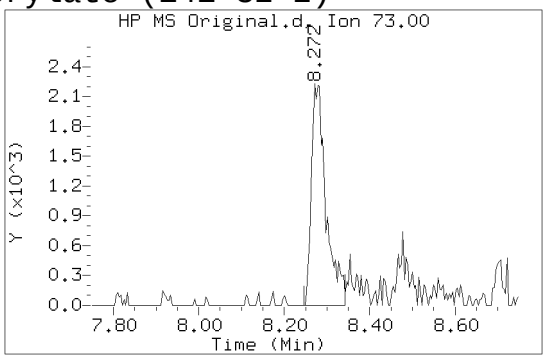
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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

Butyl acrylate (141-32-2)

Reason Code:

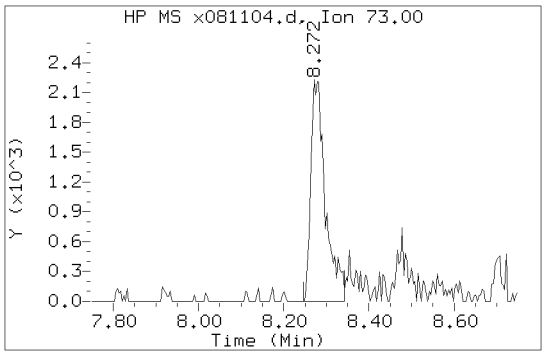
BEFORE

MASS
73
AREA
5292
HEIGHT
2231
12-Aug-2023
22:50



AFTER

MASS
73
AREA
5292
HEIGHT
2231
12-Aug-2023
22:50

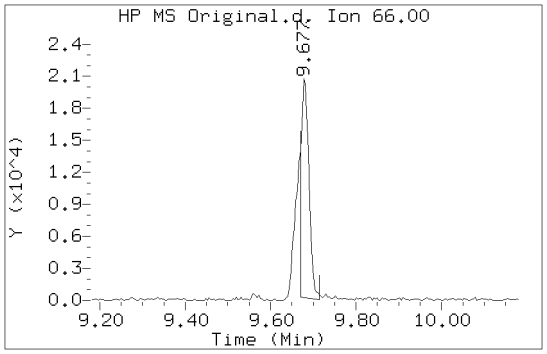


Dicyclopentadiene (77-73-6)

Reason Code:

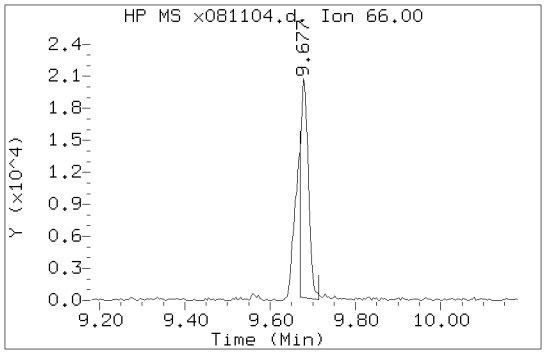
BEFORE

MASS
66
AREA
27109
HEIGHT
20508
12-Aug-2023
22:50



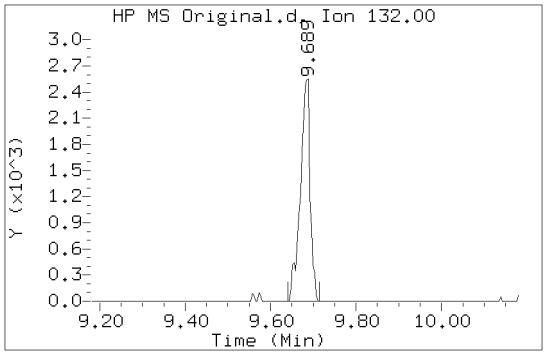
AFTER

MASS
66
AREA
27109
HEIGHT
20508
12-Aug-2023
22:50



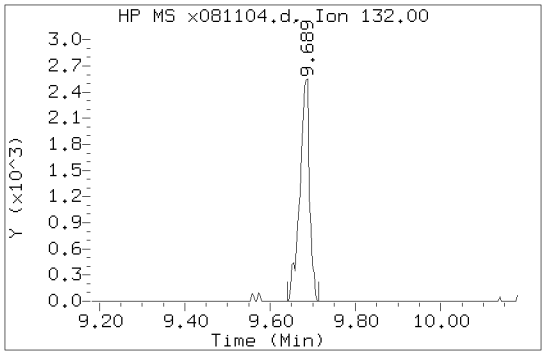
BEFORE

MASS
132
AREA
4182
HEIGHT
2551
12-Aug-2023
22:50



AFTER

MASS
132
AREA
4182
HEIGHT
2551
12-Aug-2023
22:50

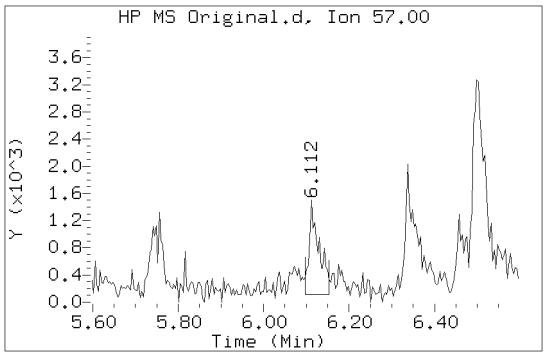


Epichlorohydrin (106-89-8)

Reason Code:

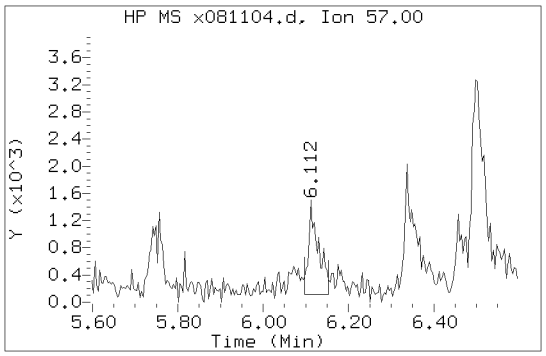
BEFORE

MASS
57
AREA
2242
HEIGHT
1389
12-Aug-2023
22:50



AFTER

MASS
57
AREA
2242
HEIGHT
1389
12-Aug-2023
22:50

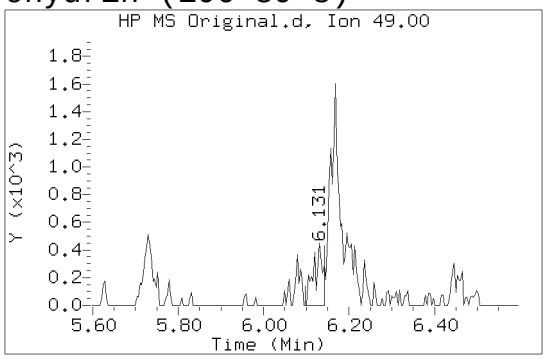


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LabSampID : VSTD001

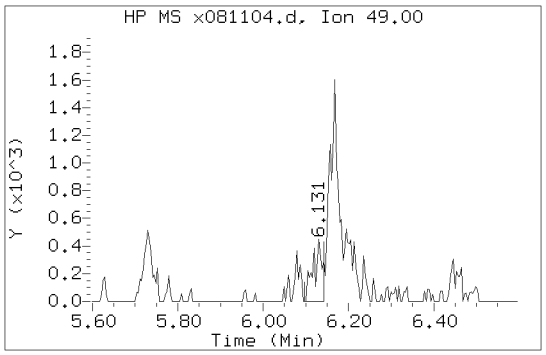
Epichlorohydrin (106-89-8)

Reason Code:

BEFORE
MASS
49
AREA
642
HEIGHT
450
12-Aug-2023
22:50



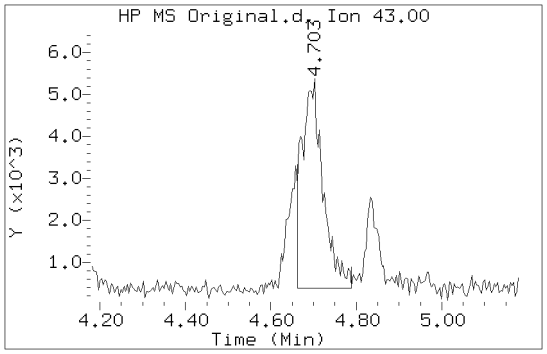
AFTER
MASS
49
AREA
642
HEIGHT
450
12-Aug-2023
22:50



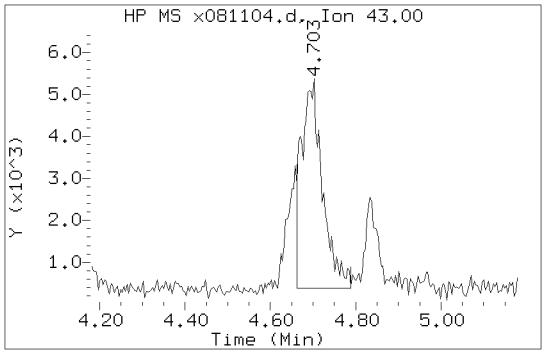
Isopropyl acetate (108-21-4)

Reason Code:

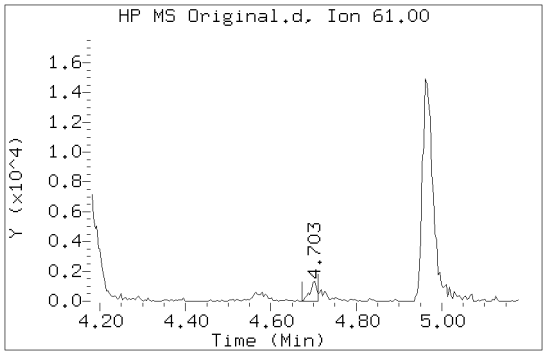
BEFORE
MASS
43
AREA
17384
HEIGHT
4986
12-Aug-2023
22:50



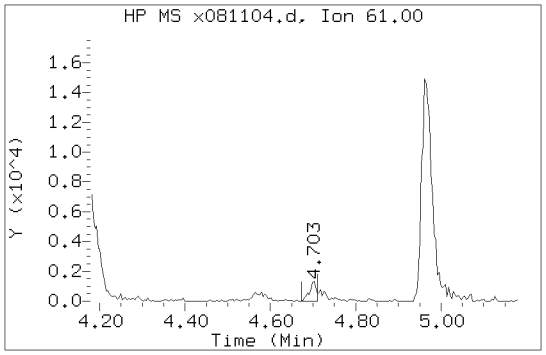
AFTER
MASS
43
AREA
17384
HEIGHT
4986
12-Aug-2023
22:50



BEFORE
MASS
61
AREA
1480
HEIGHT
1331
12-Aug-2023
22:50



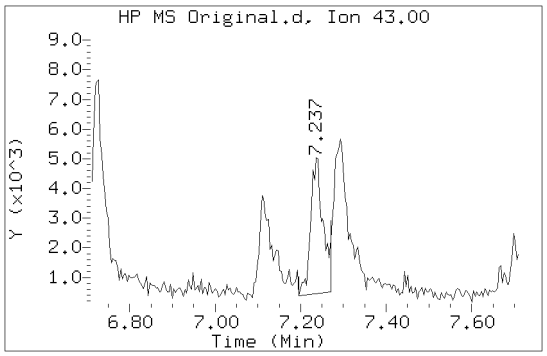
AFTER
MASS
61
AREA
1480
HEIGHT
1331
12-Aug-2023
22:50



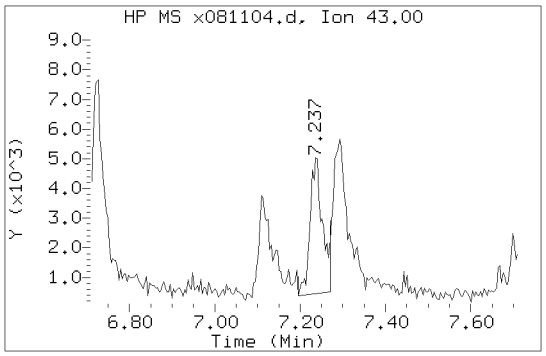
n-Butyl acetate (123-86-4)

Reason Code:

BEFORE
MASS
43
AREA
9353
HEIGHT
4578
12-Aug-2023
22:50



AFTER
MASS
43
AREA
9353
HEIGHT
4578
12-Aug-2023
22:50

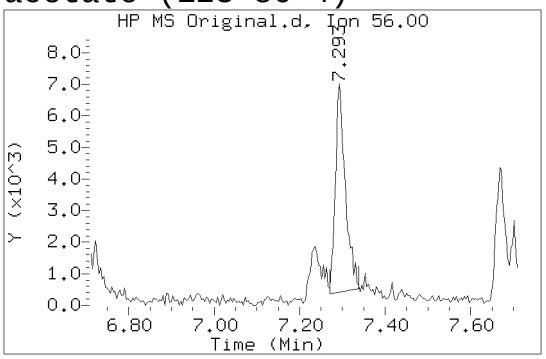


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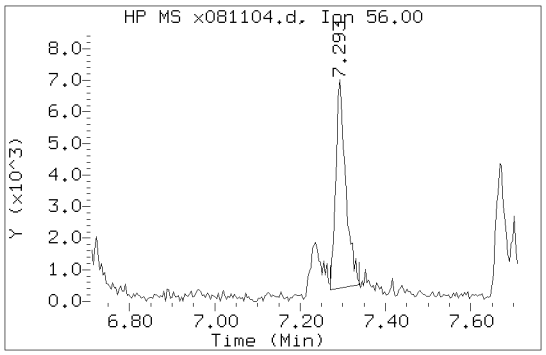
n-Butyl acetate (123-86-4)

Reason Code:

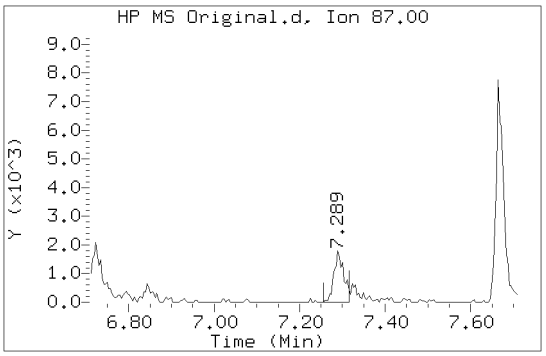
BEFORE
MASS
56
AREA
10667
HEIGHT
6599
12-Aug-2023
22:50



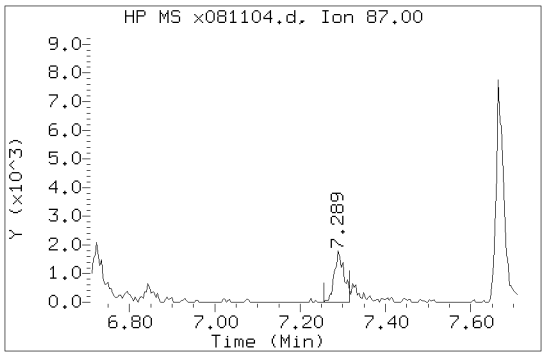
AFTER
MASS
56
AREA
10667
HEIGHT
6599
12-Aug-2023
22:50



BEFORE
MASS
87
AREA
2848
HEIGHT
1803
12-Aug-2023
22:50



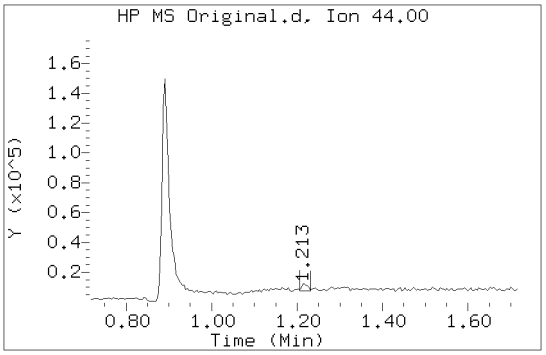
AFTER
MASS
87
AREA
2848
HEIGHT
1803
12-Aug-2023
22:50



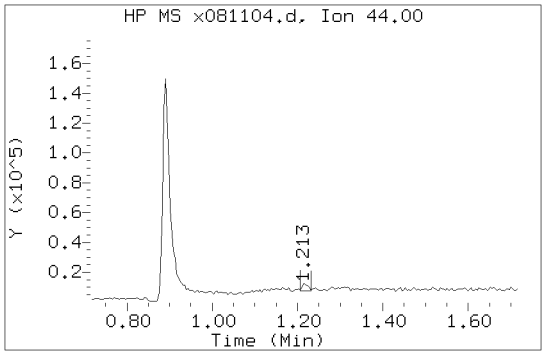
Acetaldehyde (75-07-0)

Reason Code:

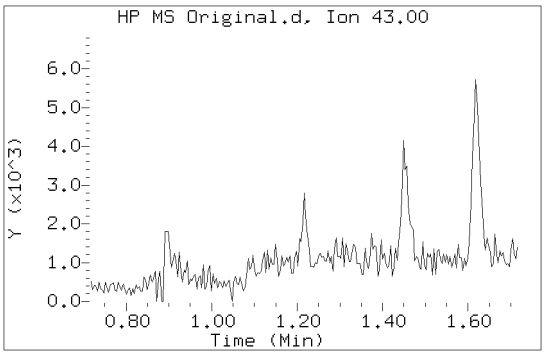
BEFORE
MASS
44
AREA
4717
HEIGHT
4655
12-Aug-2023
22:50



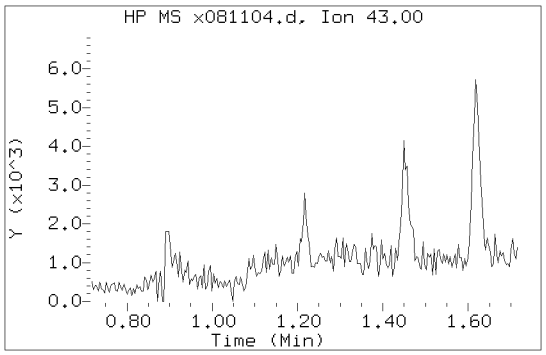
AFTER
MASS
44
AREA
4717
HEIGHT
4655
12-Aug-2023
22:50



BEFORE
MASS
43
AREA
0
HEIGHT
0
12-Aug-2023
22:50



AFTER
MASS
43
AREA
0
HEIGHT
0
12-Aug-2023
22:50

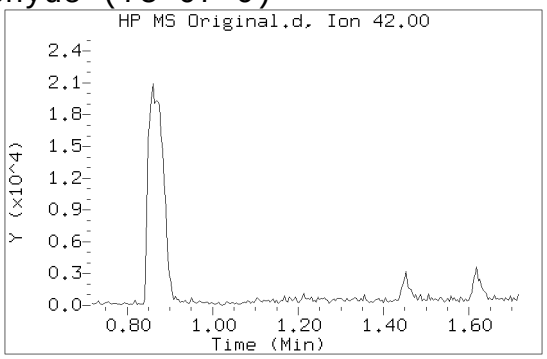


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LabSampID : VSTD001

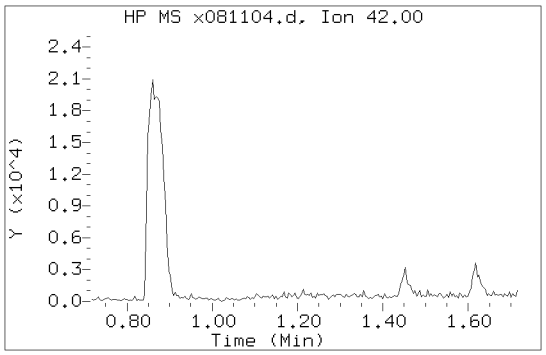
Acetaldehyde (75-07-0)

Reason Code:

BEFORE
MASS
42
AREA
0
HEIGHT
0
12-Aug-2023
22:50



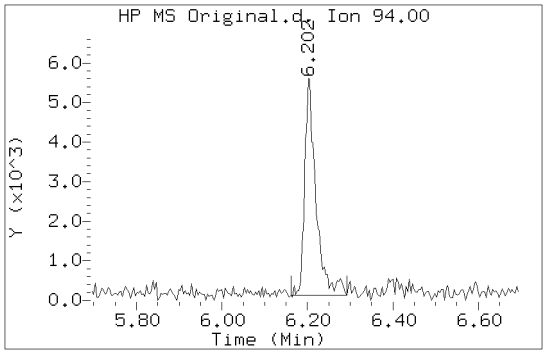
AFTER
MASS
42
AREA
0
HEIGHT
0
12-Aug-2023
22:50



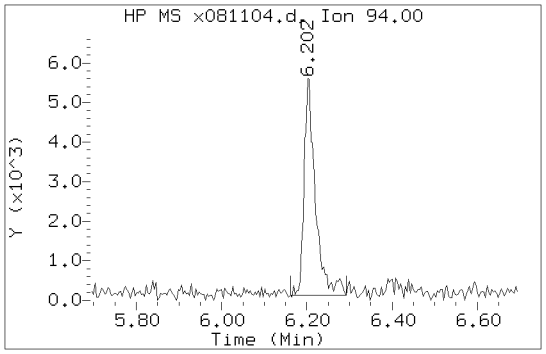
Dimethyl Disulfide (624-92-0)

Reason Code:

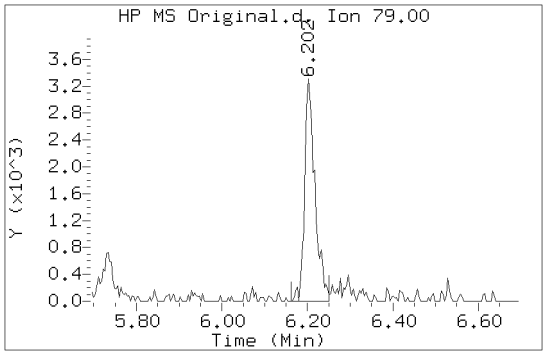
BEFORE
MASS
94
AREA
10240
HEIGHT
5474
12-Aug-2023
22:50



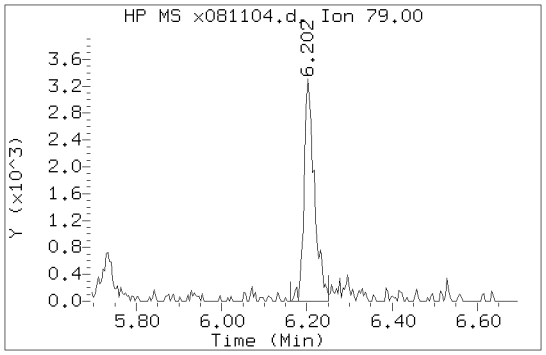
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12-Aug-2023
22:50



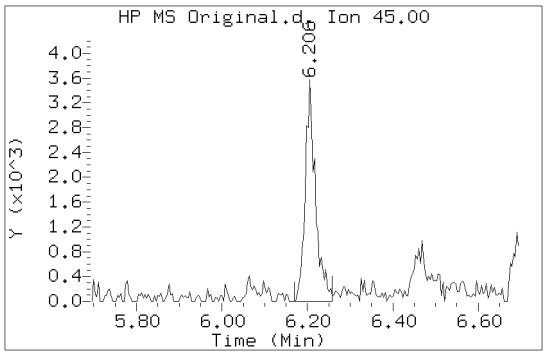
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12-Aug-2023
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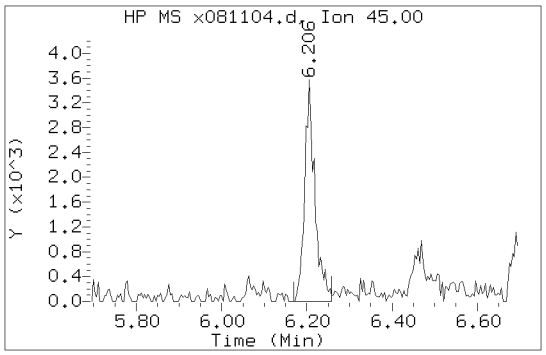
AFTER
MASS
79
AREA
5666
HEIGHT
3309
12-Aug-2023
22:50



BEFORE
MASS
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AREA
5998
HEIGHT
3574
12-Aug-2023
22:50



AFTER
MASS
45
AREA
5998
HEIGHT
3574
12-Aug-2023
22:50

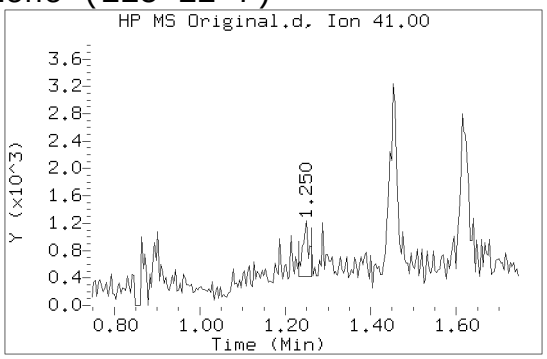


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InstruID : voa6.i
LabSampID : VSTD001

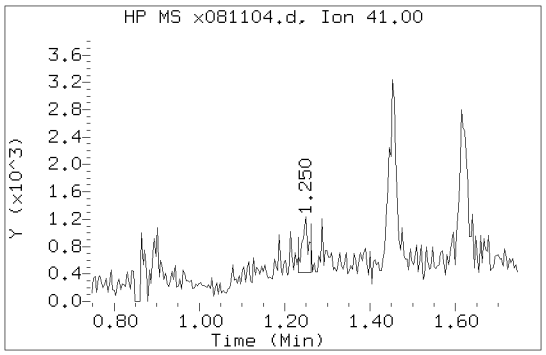
Isobutylene (115-11-7)

Reason Code:

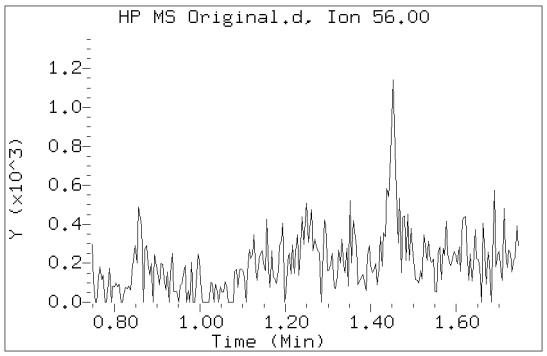
BEFORE
MASS
41
AREA
886
HEIGHT
818
12-Aug-2023
22:50



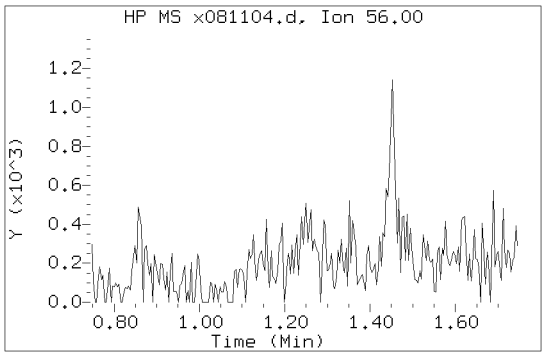
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HEIGHT
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22:50



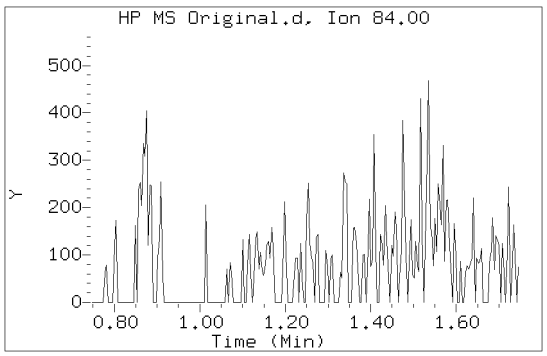
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MASS
56
AREA
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HEIGHT
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12-Aug-2023
22:50



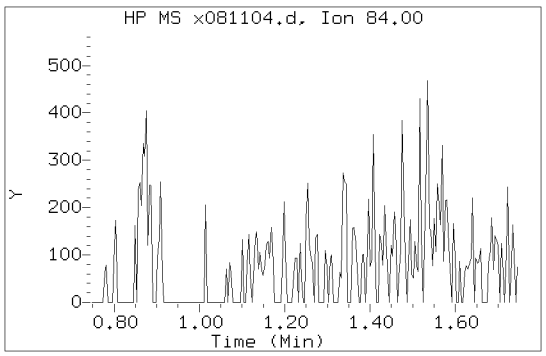
AFTER
MASS
56
AREA
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HEIGHT
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12-Aug-2023
22:50



BEFORE
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AREA
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HEIGHT
0
12-Aug-2023
22:50



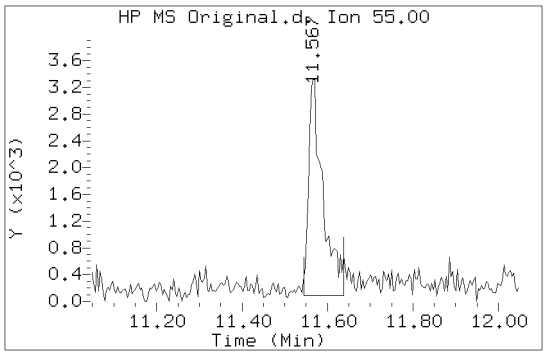
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84
AREA
0
HEIGHT
0
12-Aug-2023
22:50



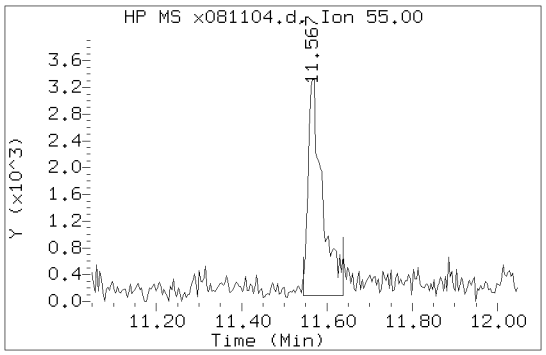
2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
55
AREA
7592
HEIGHT
3227
12-Aug-2023
22:50



AFTER
MASS
55
AREA
7592
HEIGHT
3227
12-Aug-2023
22:50



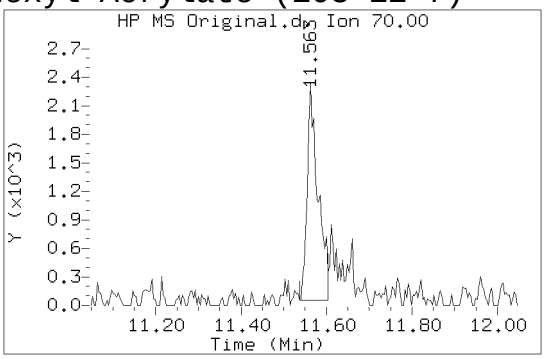
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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

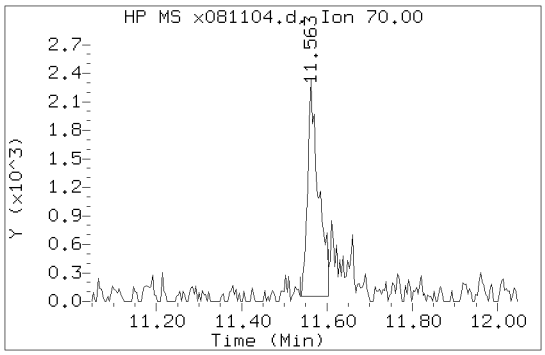
BEFORE

MASS
70
AREA
4010
HEIGHT
2275
12-Aug-2023
22:50



AFTER

MASS
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AREA
4010
HEIGHT
2275
12-Aug-2023
22:50

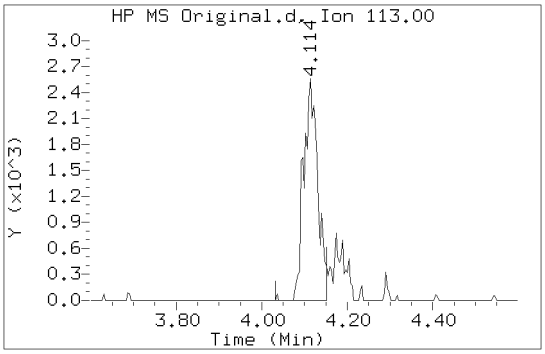


Dibromofluoromethane (1868-53-7)

Reason Code:

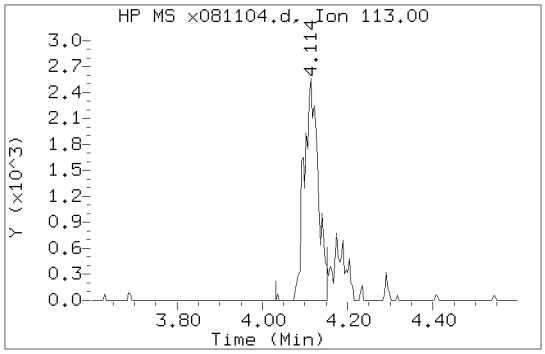
BEFORE

MASS
113
AREA
5954
HEIGHT
2561
12-Aug-2023
22:50



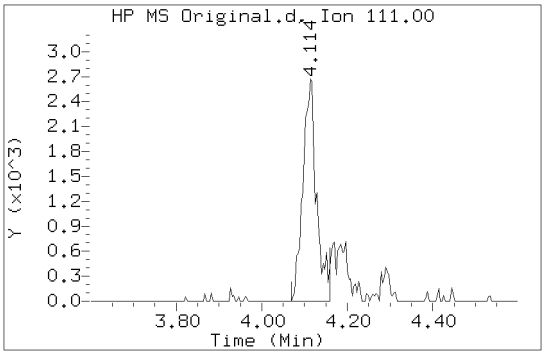
AFTER

MASS
113
AREA
5954
HEIGHT
2561
12-Aug-2023
22:50



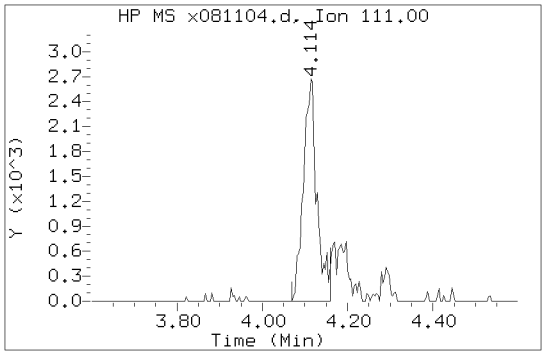
BEFORE

MASS
111
AREA
5951
HEIGHT
2673
12-Aug-2023
22:50



AFTER

MASS
111
AREA
5951
HEIGHT
2673
12-Aug-2023
22:50

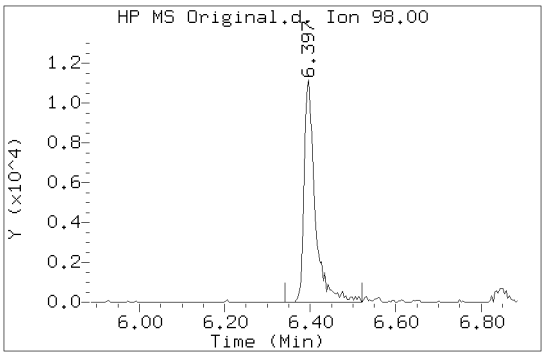


Toluene-d8 (2037-26-5)

Reason Code:

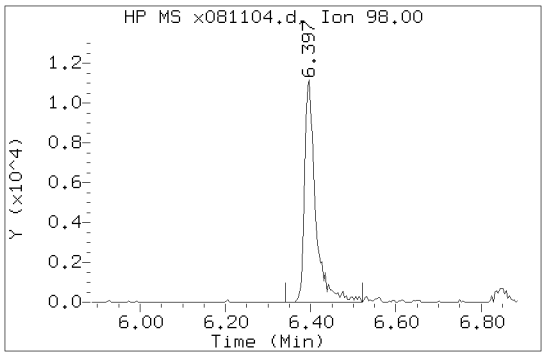
BEFORE

MASS
98
AREA
20483
HEIGHT
11168
12-Aug-2023
22:50



AFTER

MASS
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AREA
20483
HEIGHT
11168
12-Aug-2023
22:50



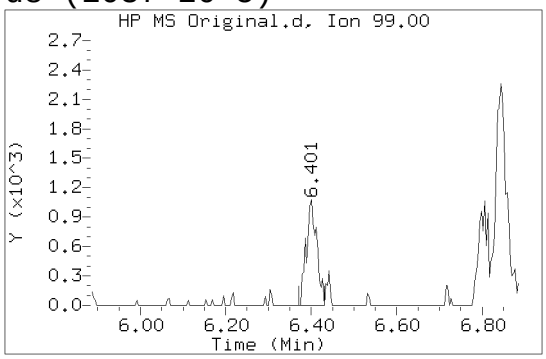
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Inj Date : 11-AUG-2023 12:35
InstruID : voa6.i
LabSampID : VSTD001

Toluene-d8 (2037-26-5)

Reason Code:

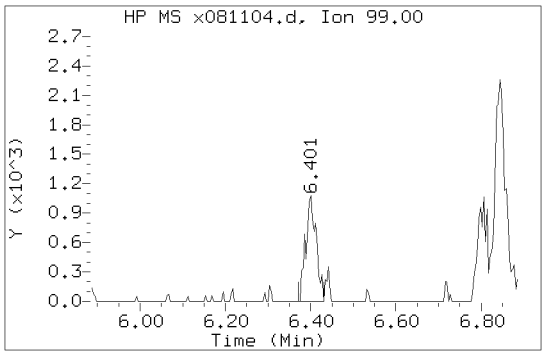
BEFORE

MASS
99
AREA
1855
HEIGHT
1076
12-Aug-2023
22:50



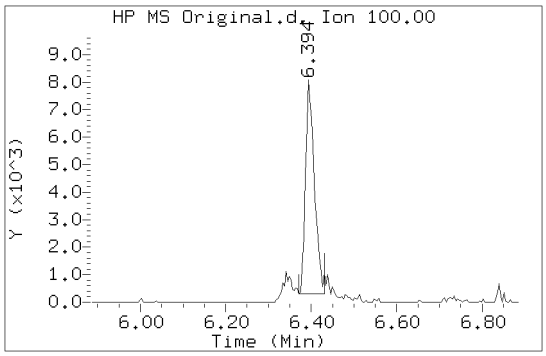
AFTER

MASS
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AREA
1855
HEIGHT
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12-Aug-2023
22:50



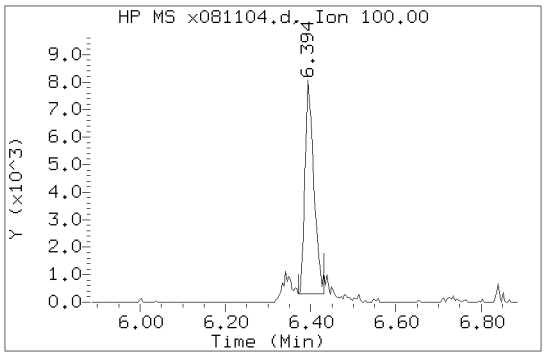
BEFORE

MASS
100
AREA
11473
HEIGHT
7782
12-Aug-2023
22:50



AFTER

MASS
100
AREA
11473
HEIGHT
7782
12-Aug-2023
22:50



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081105.D Page 1
Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081105.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 11-AUG-2023 12:55
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 12:35 Cal File: X081104.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	592297	50.0000	
135 1,4-Dioxane	88	5.617	5.617	(1.343)	3316	40.0000	44.04(M)
140 1,3-Butadiene	54	1.167	1.167	(0.279)	12815	2.00000	2.10
25 Methacrylonitrile	41	3.866	3.866	(0.925)	11361	2.00000	1.92(M)
12 Isobutyl Alcohol	43	4.695	4.695	(1.123)	36780	40.0000	39.61
13 Acetonitrile	39	2.206	2.206	(0.528)	20852	20.0000	22.82
14 Allyl Chloride	41	2.209	2.209	(0.528)	40111	2.00000	2.22
4 Propionitrile	54	3.686	3.686	(0.882)	15043	20.0000	18.23
136 n-Hexane	57	2.779	2.779	(0.665)	12200	2.00000	1.49
72 trans-1,4-Dichloro-2-butene	53	8.905	8.905	(1.161)	4155	2.00000	1.87(H)
194 Acetaldehyde	44	1.216	1.216	(0.291)	7566	8.00000	4.57(M)
23 Chloroprene	53	1.775	1.775	(0.424)	5152	2.00000	2.05(M)
145 alpha-Methylstyrene	118	9.268	9.268	(0.959)	18299	2.00000	1.77
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	20404	2.00000	1.75(M)
139 Diethyl ether	59	1.763	1.763	(0.422)	10605	2.00000	2.02
130 Ethyl Acetate	43	3.686	3.686	(0.882)	13837	2.00000	2.03(M)
40 Methyl Methacrylate	41	5.624	5.624	(1.345)	10263	2.00000	1.88
49 Ethyl Methacrylate	69	6.794	6.794	(1.368)	16413	2.00000	1.93(H)
132 n-Butanol	56	5.310	5.310	(1.270)	5108	40.0000	98.29(M)
142 Tetrahydrofuran	42	3.878	3.878	(0.927)	4312	4.00000	3.73

150	Allyl alcohol	57	2.779	2.779 (0.665)	12200	40.0000	31.71
166	1,2,3-Trimethylbenzene	105	9.733	9.733 (1.007)	45337	2.00000	2.01

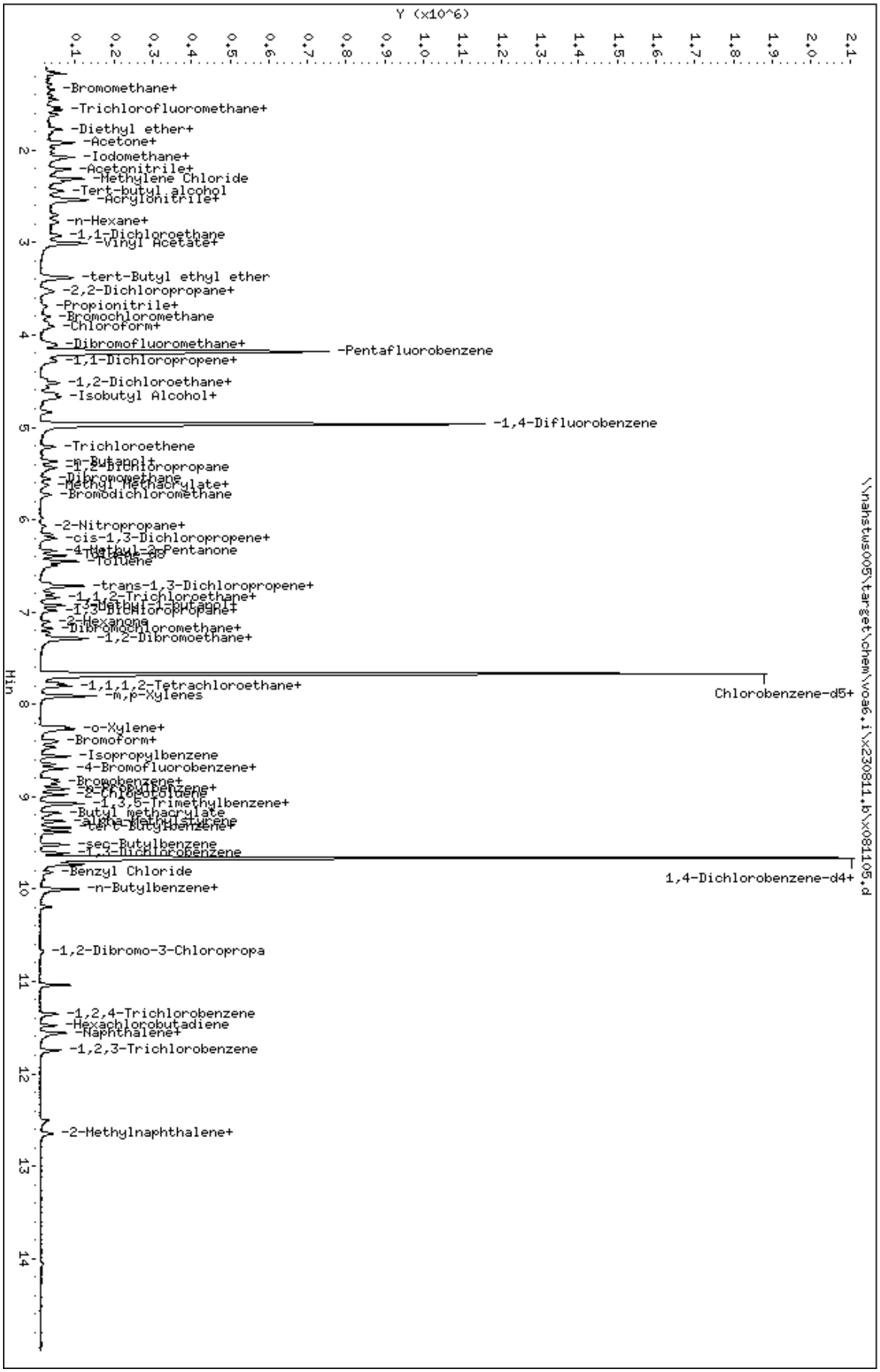
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.735	3.735	(0.893)	11619	2.00000	1.98(M)
	162 Butyl acrylate	55	8.267	8.267	(1.078)	27159	2.00000	1.89(M)
	2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	11597	2.00000	2.77
	3 Chloromethane	50	1.085	1.085	(0.260)	11158	2.00000	1.93(M)
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	14331	2.00000	2.01
	6 Bromomethane	94	1.344	1.344	(0.321)	7835	2.00000	2.04
	7 Chloroethane	64	1.411	1.411	(0.338)	9899	2.00000	2.12
	8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	20104	2.00000	1.98
	9 Acrolein	56	1.868	1.868	(0.447)	887	4.00000	1.94(M)
	10 Acetone	43	1.981	1.981	(0.474)	14349	4.00000	1.95
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	12243	2.00000	2.14
	15 Iodomethane	142	2.033	2.033	(0.486)	9663	4.00000	6.95
	16 Acrylonitrile	53	2.543	2.543	(0.608)	11577	4.00000	4.20
	17 Methylene Chloride	84	2.307	2.307	(0.552)	15136	2.00000	2.11(M)
	18 Methyl tert-butyl ether	73	2.543	2.543	(0.608)	42266	2.00000	2.07
	19 Carbon Disulfide	76	2.075	2.075	(0.496)	70178	4.00000	4.13
	20 trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	13433	2.00000	2.02
	21 Vinyl Acetate	43	3.008	3.008	(0.719)	72401	4.00000	3.68
	22 1,1-Dichloroethane	63	2.929	2.929	(0.701)	26795	2.00000	2.14
	24 2-Butanone	43	3.671	3.671	(0.878)	8139	4.00000	3.71(MH)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	17055	2.00000	2.01
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.845)	11950	2.00000	1.87
	28 Chloroform	83	3.915	3.915	(0.936)	22778	2.00000	2.07
	29 Bromochloromethane	128	3.803	3.803	(0.909)	7505	2.00000	2.06
$	30 Dibromofluoromethane	113	4.110	4.110	(0.983)	12062	2.00000	1.42
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	16785	2.00000	1.90
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	14157	2.00000	1.94(H)
	33 1,2-Dichloroethane	62	4.571	4.571	(0.921)	16915	2.00000	1.92
	34 Carbon Tetrachloride	117	4.267	4.267	(0.860)	14921	2.00000	1.94(H)
$	35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.073)	13488	2.00000	1.16
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	923485	50.0000	
	37 Benzene	78	4.522	4.522	(0.911)	43496	2.00000	1.91
	38 Trichloroethene	130	5.212	5.212	(1.050)	12729	2.00000	1.94
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	15520	2.00000	1.83
	41 2-Chloroethylvinyl ether	63	6.067	6.067	(1.222)	9072	4.00000	4.18(M)
	42 1,2-Dichloropropane	63	5.448	5.448	(1.097)	12216	2.00000	1.90(M)
	44 Dibromomethane	93	5.553	5.553	(1.119)	8617	2.00000	1.96
	45 4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	26871	4.00000	4.25
	46 cis-1,3-Dichloropropene	75	6.161	6.161	(1.241)	17563	2.00000	1.81
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	881014	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	43332	2.00000	2.08
	50 Toluene	91	6.453	6.453	(0.842)	45696	2.00000	1.86
	51 trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	15088	2.00000	1.85
	52 2-Hexanone	43	7.101	7.101	(0.926)	17279	4.00000	4.07(M)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	9586	2.00000	1.95
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	19127	2.00000	1.91
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	13173	2.00000	1.86
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	8822	2.00000	1.72(M)
	57 1,2-Dibromoethane	107	7.266	7.266	(0.948)	11663	2.00000	1.95
	58 1-Chlorohexane	55	7.701	7.701	(1.551)	10090	2.00000	1.88(MH)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	32047	2.00000	1.89
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	12365	2.00000	1.89

61 Ethylbenzene	106	7.802	7.802 (1.018)	14909	2.00000	1.78
62 m,p-Xylenes	106	7.907	7.907 (1.031)	38266	4.00000	3.58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	19853	2.00000	1.88
	64 Styrene	104	8.271	8.271	(1.079)	30274	2.00000	1.72
	66 Bromoform	173	8.413	8.413	(1.097)	8610	2.00000	1.80
	67 Isopropylbenzene	105	8.563	8.563	(1.117)	45338	2.00000	1.73
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	16903	2.00000	2.13(M)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	21205	2.00000	2.70
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	485300	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	12105	2.00000	2.08(M)
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	49153	2.00000	1.71
	74 Bromobenzene	156	8.811	8.811	(0.912)	14603	2.00000	1.88
	75 1,3,5-Trimethylbenzene	105	9.069	9.069	(0.939)	35325	2.00000	1.68
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	34759	2.00000	1.89
	77 4-Chlorotoluene	91	9.081	9.081	(0.940)	40941	2.00000	1.93
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	30447	2.00000	1.69
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	36713	2.00000	1.69
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	41789	2.00000	1.69
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	37168	2.00000	1.66
	83 1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	25707	2.00000	1.86
	84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	28704	2.00000	1.94
	86 Benzyl Chloride	91	9.819	9.819	(1.281)	20601	2.00000	1.63(M)
	87 n-Butylbenzene	91	10.003	10.003	(1.035)	30922	2.00000	3.38
	88 1,2-Dichlorobenzene	146	10.003	10.003	(1.035)	26477	2.00000	1.89
	89 1,2-Dibromo-3-Chloropropane	155	10.674	10.674	(1.105)	2798	2.00000	2.09(M)
	90 1,2,4-Trichlorobenzene	180	11.356	11.356	(1.175)	16853	2.00000	1.82
	91 Hexachlorobutadiene	225	11.480	11.480	(1.188)	6937	2.00000	1.55
	92 Naphthalene	128	11.566	11.566	(1.197)	47126	2.00000	2.04
	93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	16836	2.00000	1.87
M	94 1,2-Dichloroethylene (total)	96				25383	4.00000	
M	95 Xylenes (total)	106				58119	6.00000	
	141 Cyclohexane	56	4.125	4.125	(0.987)	12705	2.00000	3.37(H)
	138 Freon TF	101	1.917	1.917	(0.459)	10755	2.00000	3.02
	147 Methylcyclohexane	55	5.370	5.370	(1.082)	25754	2.00000	1.85(M)
	146 Methyl Acetate	43	2.239	2.239	(0.536)	10629	2.00000	1.99
	148 Tert-Butyl alcohol	59	2.438	2.438	(0.583)	45475	40.0000	51.55
	149 Isopropyl Alcohol	45	2.104	2.104	(0.503)	25882	40.0000	50.16

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081105.d
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Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

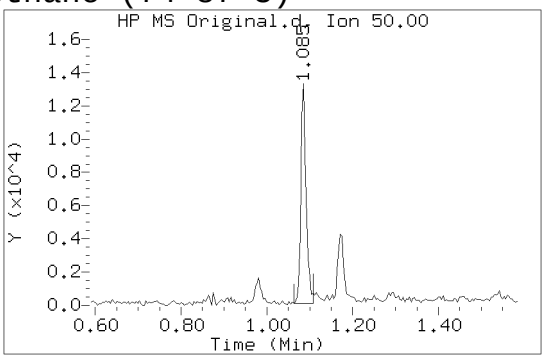
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081105.d
Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

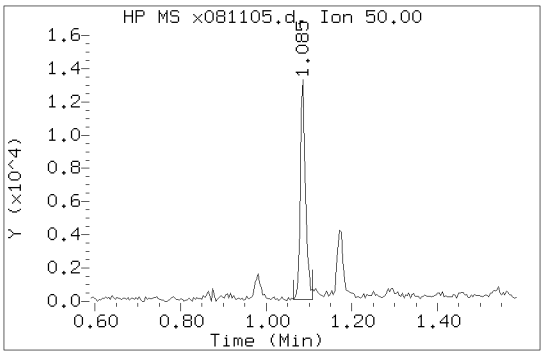
Chloromethane (74-87-3)

Reason Code:

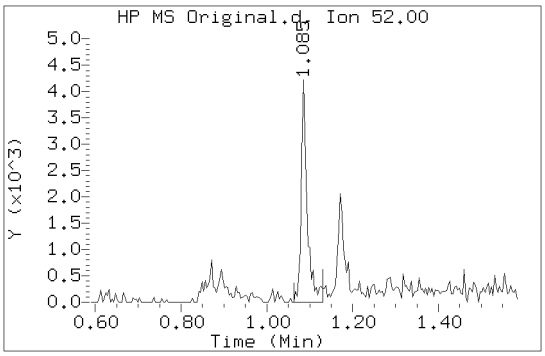
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50
AREA
11158
HEIGHT
13202
12-Aug-2023
22:50



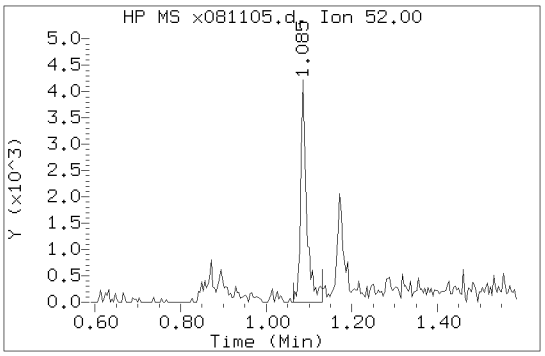
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MASS
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AREA
11158
HEIGHT
13202
12-Aug-2023
22:50



BEFORE
MASS
52
AREA
4146
HEIGHT
4222
12-Aug-2023
22:50



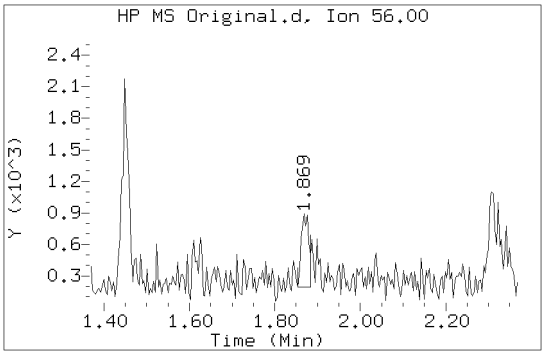
AFTER
MASS
52
AREA
4146
HEIGHT
4222
12-Aug-2023
22:50



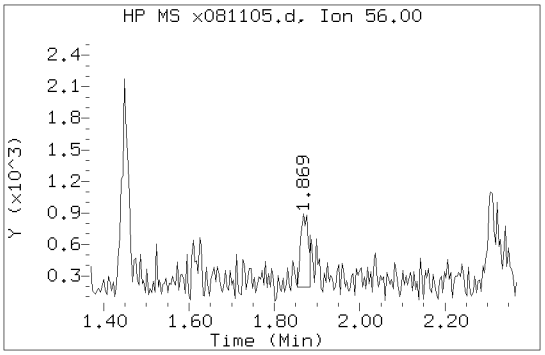
Acrolein (107-02-8)

Reason Code:

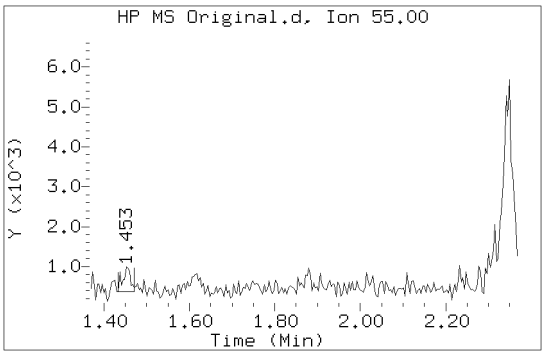
BEFORE
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56
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887
HEIGHT
696
12-Aug-2023
22:50



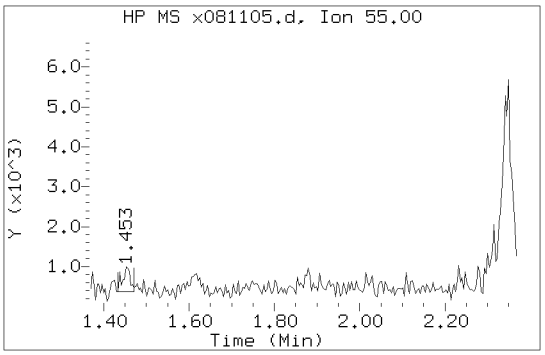
AFTER
MASS
56
AREA
887
HEIGHT
696
12-Aug-2023
22:50



BEFORE
MASS
55
AREA
792
HEIGHT
631
12-Aug-2023
22:50



AFTER
MASS
55
AREA
792
HEIGHT
631
12-Aug-2023
22:50

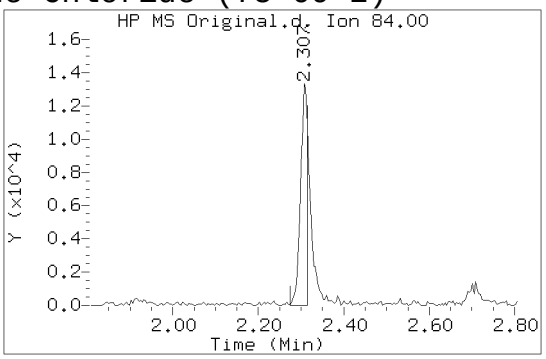


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InstruID : voa6.i
LabSampID : VSTD002

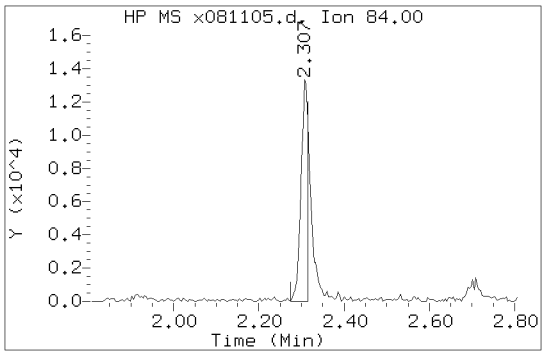
Methylene Chloride (75-09-2)

Reason Code:

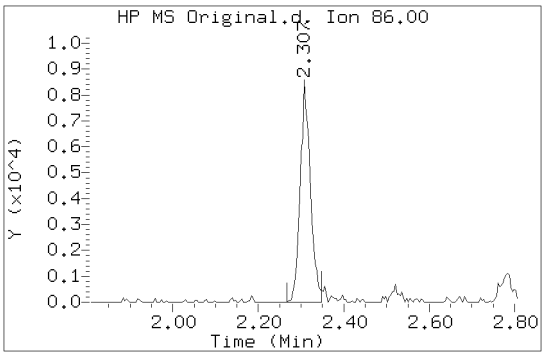
BEFORE
MASS
84
AREA
15136
HEIGHT
13341
12-Aug-2023
22:50



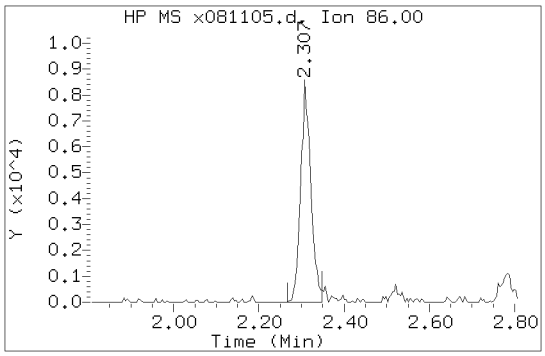
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AREA
15136
HEIGHT
13341
12-Aug-2023
22:50



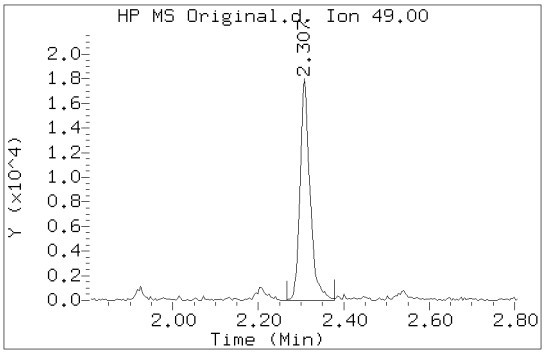
BEFORE
MASS
86
AREA
14526
HEIGHT
8579
12-Aug-2023
22:50



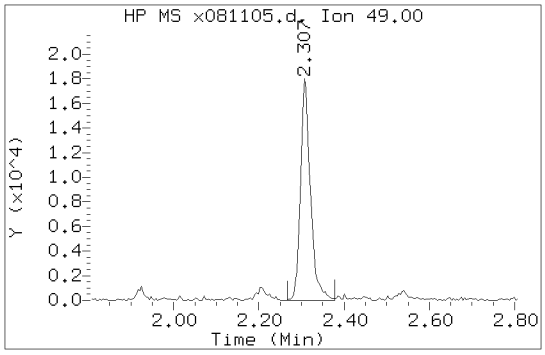
AFTER
MASS
86
AREA
14526
HEIGHT
8579
12-Aug-2023
22:50



BEFORE
MASS
49
AREA
29880
HEIGHT
18008
12-Aug-2023
22:50



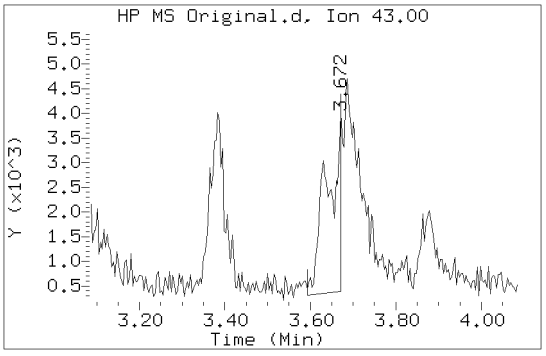
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HEIGHT
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12-Aug-2023
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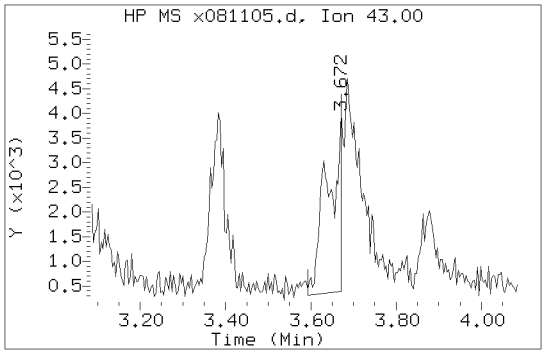
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
43
AREA
8139
HEIGHT
3612
12-Aug-2023
22:50



AFTER
MASS
43
AREA
8139
HEIGHT
3612
12-Aug-2023
22:50



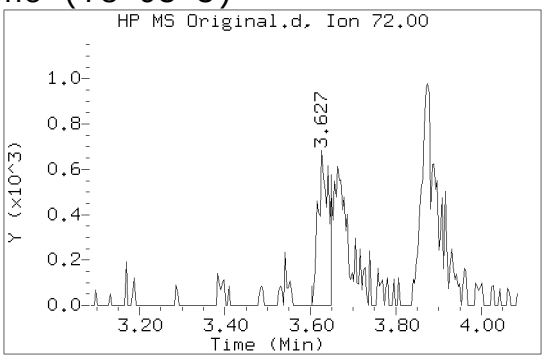
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Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

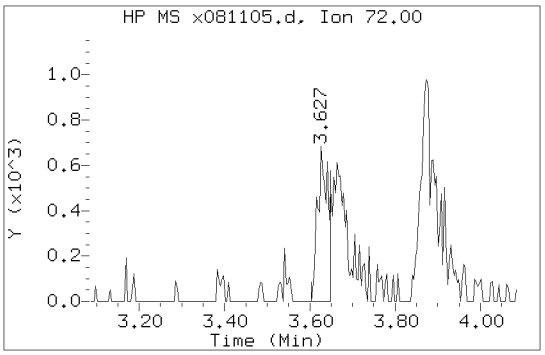
BEFORE

MASS
72
AREA
1165
HEIGHT
683
12-Aug-2023
22:50



AFTER

MASS
72
AREA
1165
HEIGHT
683
12-Aug-2023
22:50

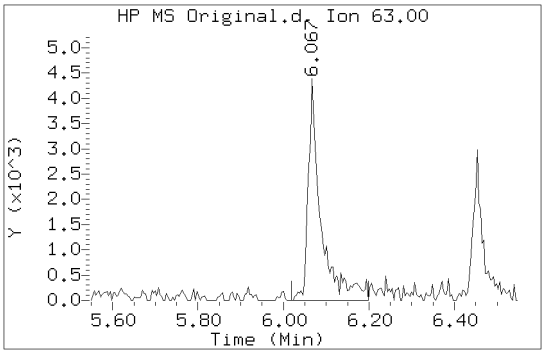


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

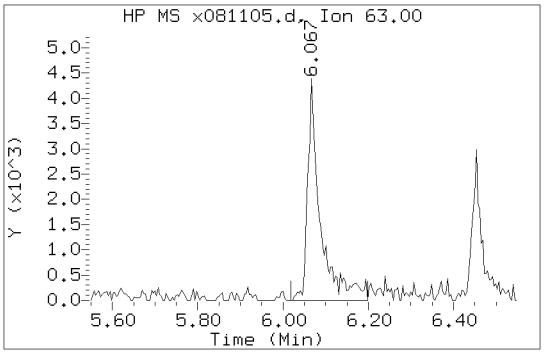
BEFORE

MASS
63
AREA
9072
HEIGHT
4387
12-Aug-2023
22:50



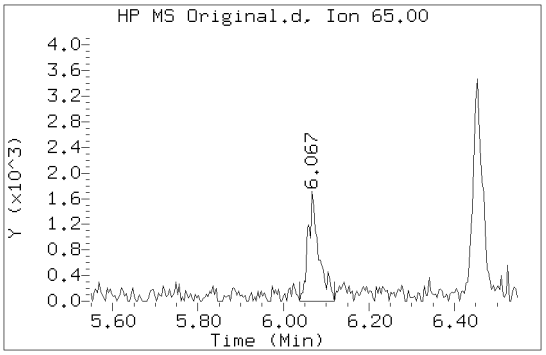
AFTER

MASS
63
AREA
9072
HEIGHT
4387
12-Aug-2023
22:50



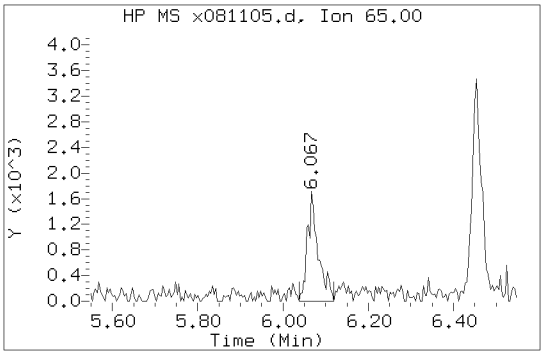
BEFORE

MASS
65
AREA
3015
HEIGHT
1713
12-Aug-2023
22:50



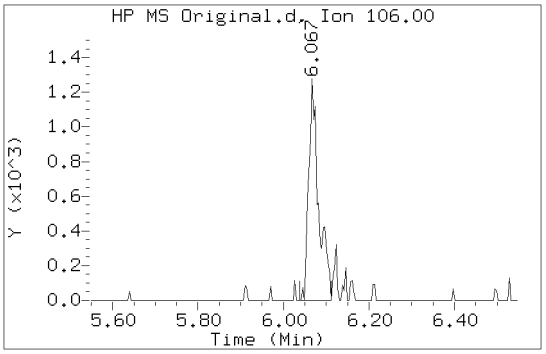
AFTER

MASS
65
AREA
3015
HEIGHT
1713
12-Aug-2023
22:50



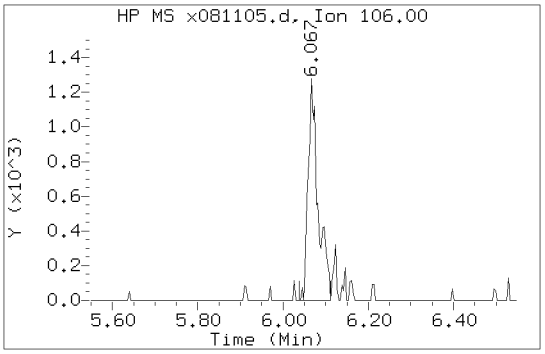
BEFORE

MASS
106
AREA
2064
HEIGHT
1278
12-Aug-2023
22:50



AFTER

MASS
106
AREA
2064
HEIGHT
1278
12-Aug-2023
22:50

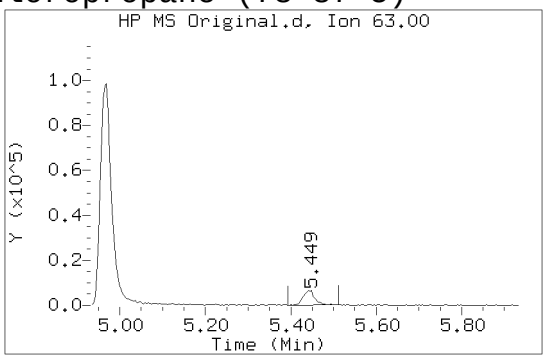


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Inj Date : 11-AUG-2023 12:55
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LabSampID : VSTD002

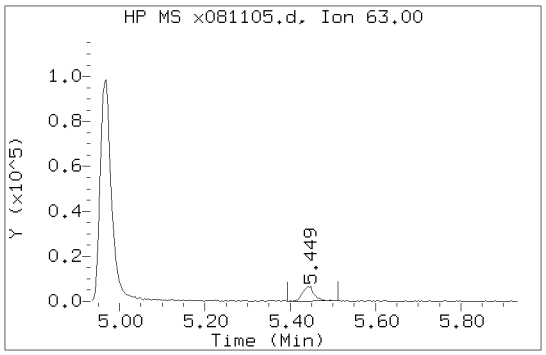
1,2-Dichloropropane (78-87-5)

Reason Code:

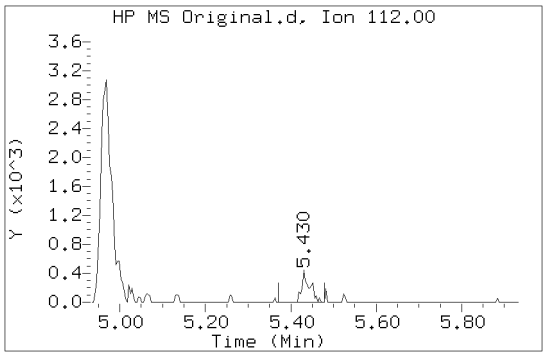
BEFORE
MASS
63
AREA
12216
HEIGHT
6332
12-Aug-2023
22:50



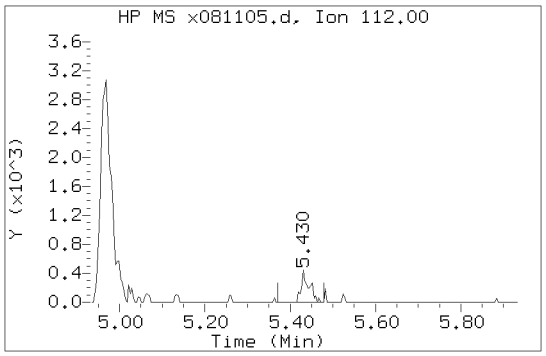
AFTER
MASS
63
AREA
12216
HEIGHT
6332
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22:50



BEFORE
MASS
112
AREA
571
HEIGHT
441
12-Aug-2023
22:50



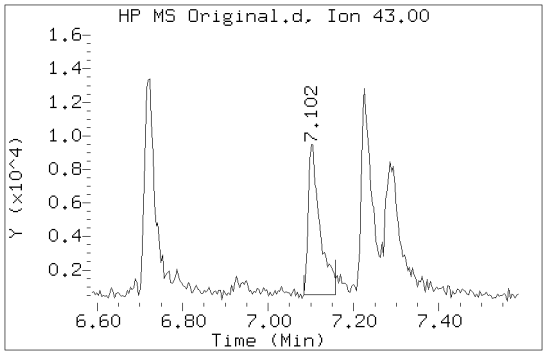
AFTER
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AREA
571
HEIGHT
441
12-Aug-2023
22:50



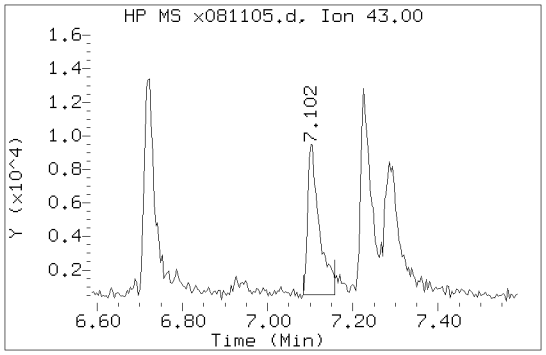
2-Hexanone (591-78-6)

Reason Code:

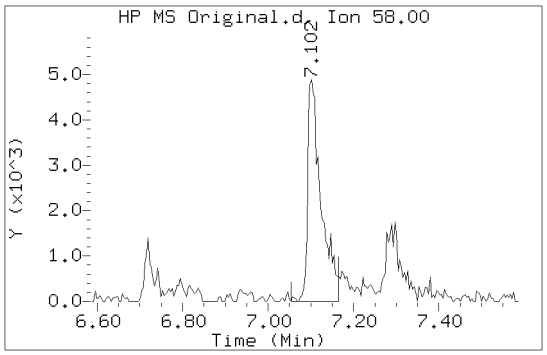
BEFORE
MASS
43
AREA
17279
HEIGHT
8977
12-Aug-2023
22:50



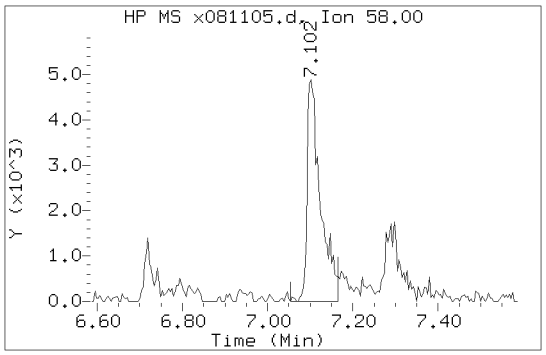
AFTER
MASS
43
AREA
17279
HEIGHT
8977
12-Aug-2023
22:50



BEFORE
MASS
58
AREA
10875
HEIGHT
4886
12-Aug-2023
22:50



AFTER
MASS
58
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10875
HEIGHT
4886
12-Aug-2023
22:50

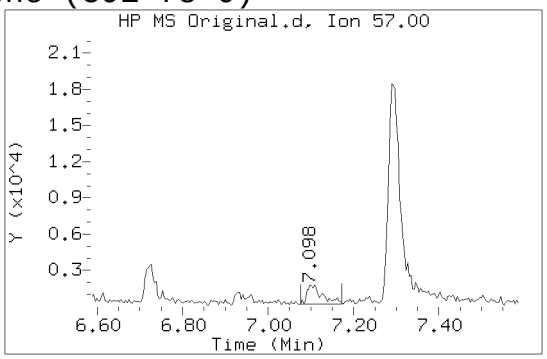


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LabSampID : VSTD002

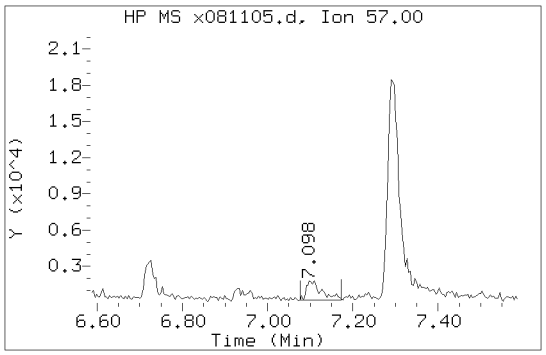
2-Hexanone (591-78-6)

Reason Code:

BEFORE
MASS
57
AREA
4001
HEIGHT
1589
12-Aug-2023
22:50



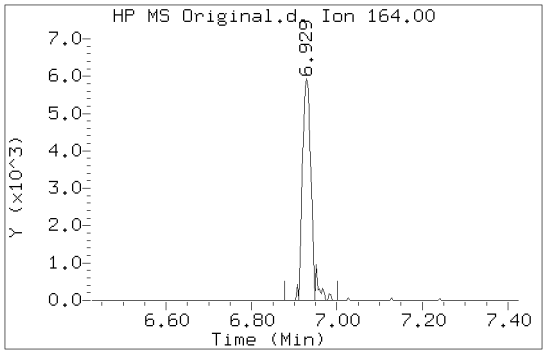
AFTER
MASS
57
AREA
4001
HEIGHT
1589
12-Aug-2023
22:50



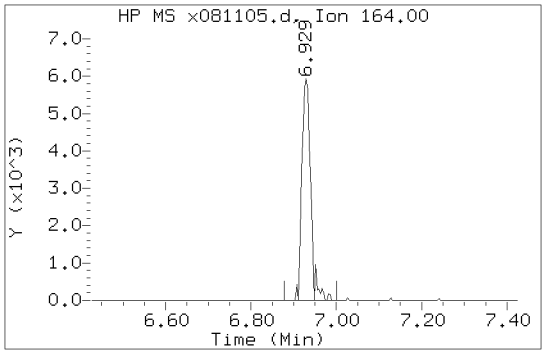
Tetrachloroethene (127-18-4)

Reason Code:

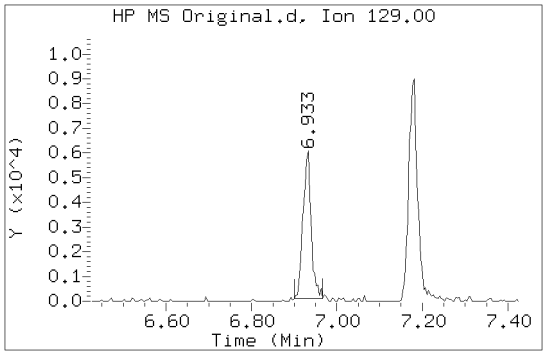
BEFORE
MASS
164
AREA
8822
HEIGHT
5932
12-Aug-2023
22:50



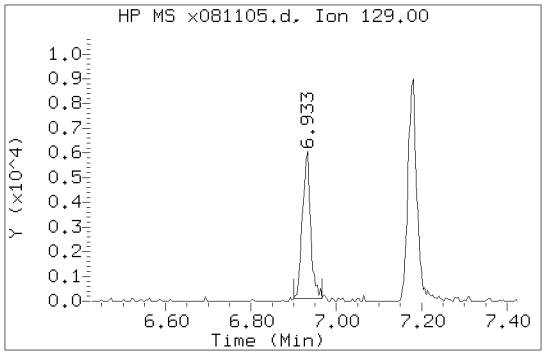
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8822
HEIGHT
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12-Aug-2023
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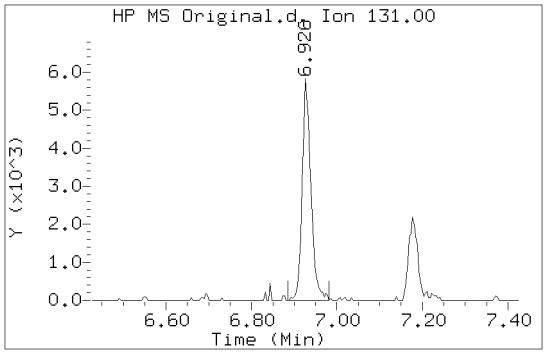
BEFORE
MASS
129
AREA
8163
HEIGHT
6005
12-Aug-2023
22:50



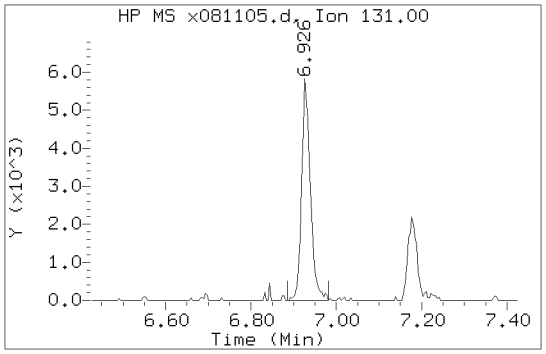
AFTER
MASS
129
AREA
8163
HEIGHT
6005
12-Aug-2023
22:50



BEFORE
MASS
131
AREA
8541
HEIGHT
5830
12-Aug-2023
22:50



AFTER
MASS
131
AREA
8541
HEIGHT
5830
12-Aug-2023
22:50

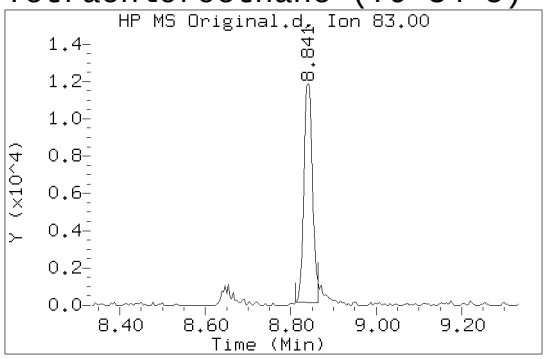


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InstruID : voa6.i
LabSampID : VSTD002

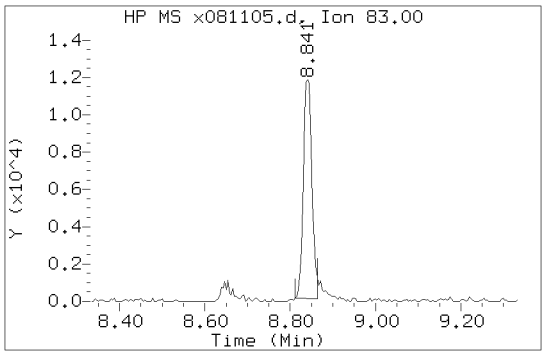
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

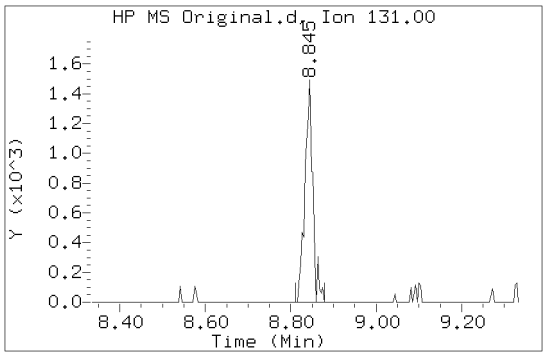
BEFORE
MASS
83
AREA
16903
HEIGHT
11730
12-Aug-2023
22:50



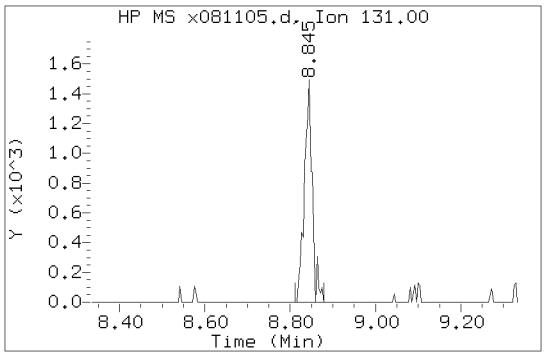
AFTER
MASS
83
AREA
16903
HEIGHT
11730
12-Aug-2023
22:50



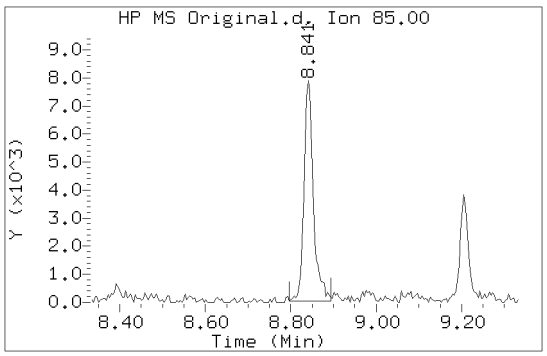
BEFORE
MASS
131
AREA
1947
HEIGHT
1493
12-Aug-2023
22:50



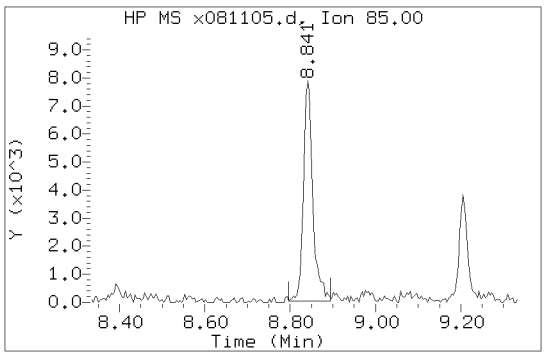
AFTER
MASS
131
AREA
1947
HEIGHT
1493
12-Aug-2023
22:50



BEFORE
MASS
85
AREA
12202
HEIGHT
7848
12-Aug-2023
22:50



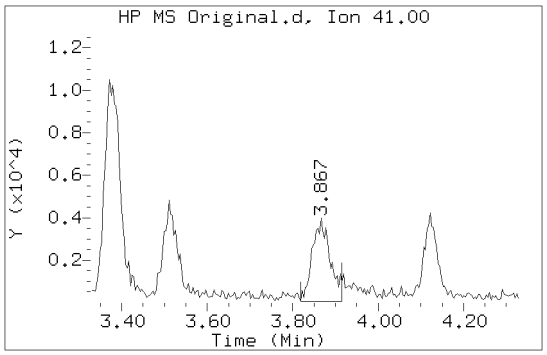
AFTER
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AREA
12202
HEIGHT
7848
12-Aug-2023
22:50



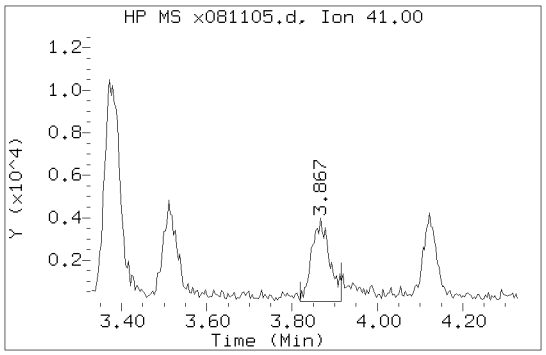
Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
MASS
41
AREA
11361
HEIGHT
3925
12-Aug-2023
22:50



AFTER
MASS
41
AREA
11361
HEIGHT
3925
12-Aug-2023
22:50

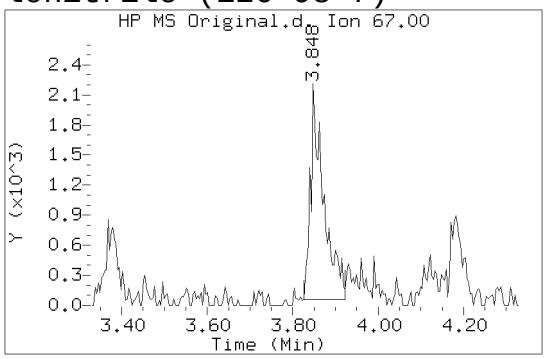


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InstruID : voa6.i
LabSampID : VSTD002

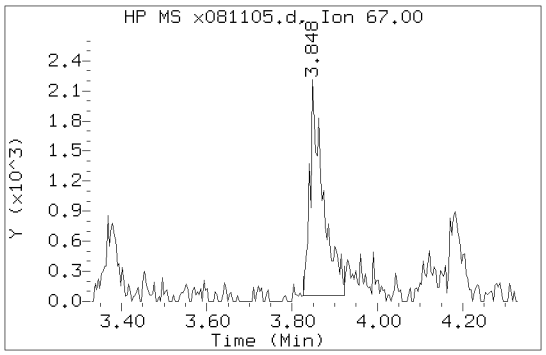
Methacrylonitrile (126-98-7)

Reason Code:

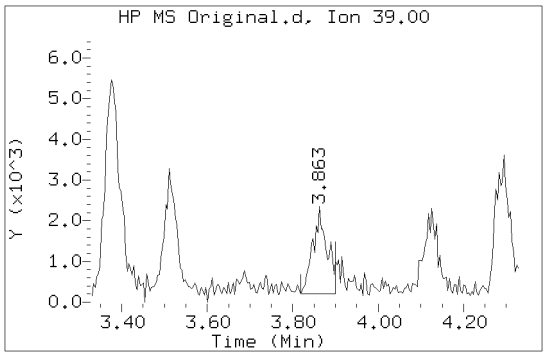
BEFORE
MASS
67
AREA
4555
HEIGHT
2155
12-Aug-2023
22:50



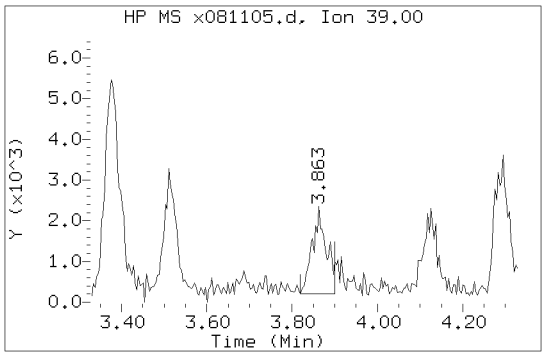
AFTER
MASS
67
AREA
4555
HEIGHT
2155
12-Aug-2023
22:50



BEFORE
MASS
39
AREA
5023
HEIGHT
2154
12-Aug-2023
22:50



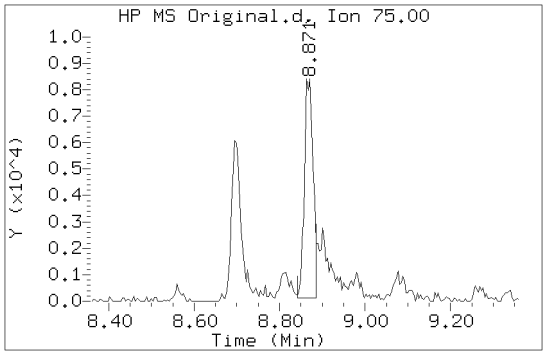
AFTER
MASS
39
AREA
5023
HEIGHT
2154
12-Aug-2023
22:50



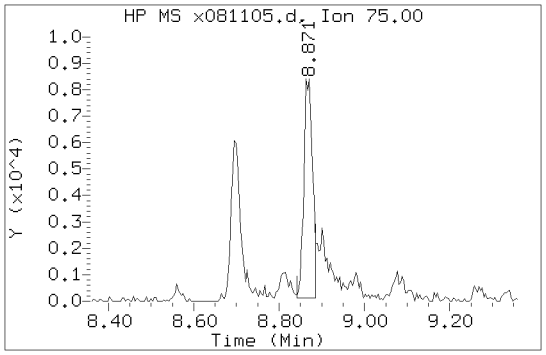
1,2,3-Trichloropropane (96-18-4)

Reason Code:

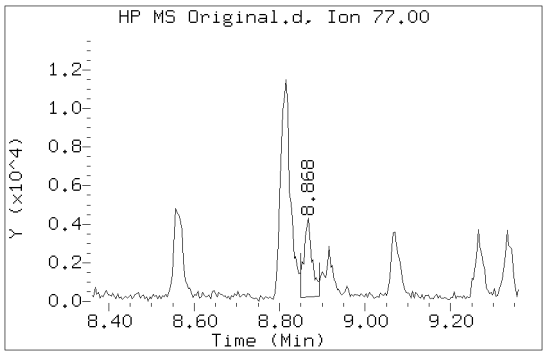
BEFORE
MASS
75
AREA
12105
HEIGHT
8293
12-Aug-2023
22:50



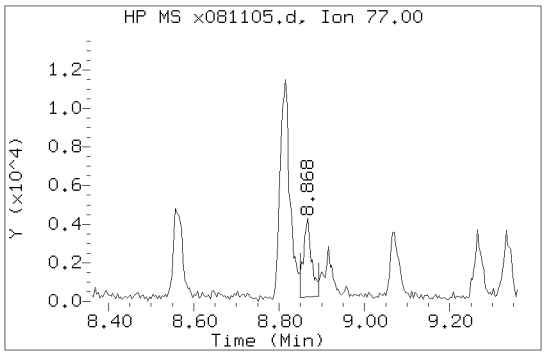
AFTER
MASS
75
AREA
12105
HEIGHT
8293
12-Aug-2023
22:50



BEFORE
MASS
77
AREA
5802
HEIGHT
4087
12-Aug-2023
22:50



AFTER
MASS
77
AREA
5802
HEIGHT
4087
12-Aug-2023
22:50

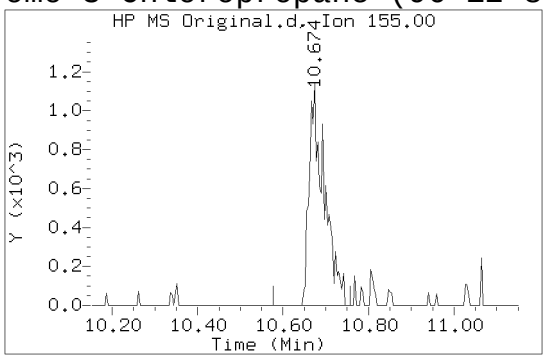


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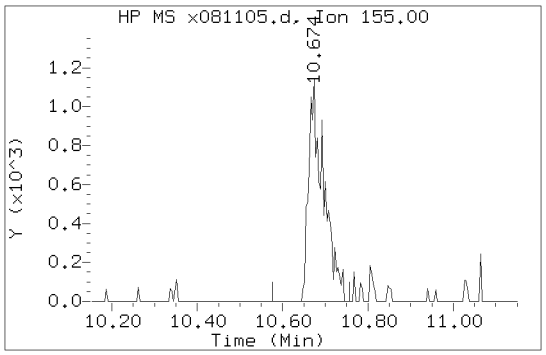
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

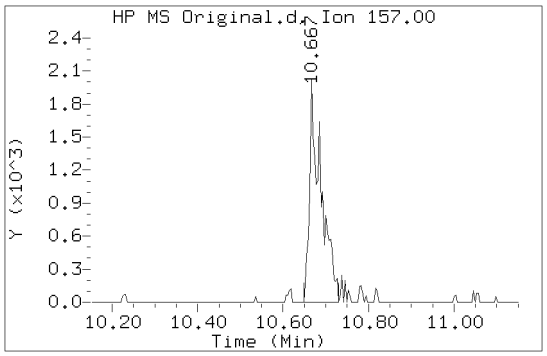
BEFORE
MASS
155
AREA
2798
HEIGHT
1139
12-Aug-2023
22:50



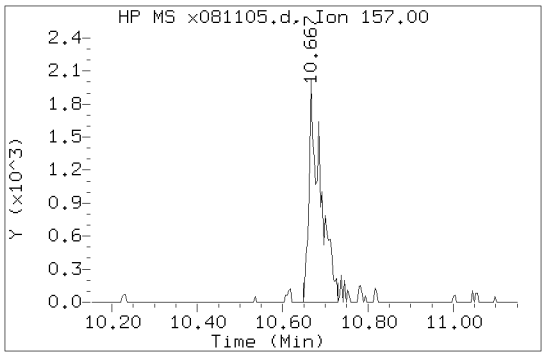
AFTER
MASS
155
AREA
2798
HEIGHT
1139
12-Aug-2023
22:50



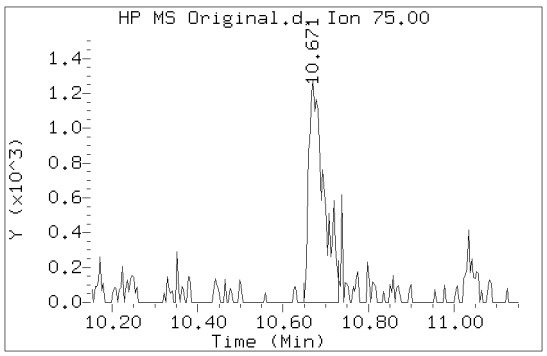
BEFORE
MASS
157
AREA
3784
HEIGHT
2019
12-Aug-2023
22:50



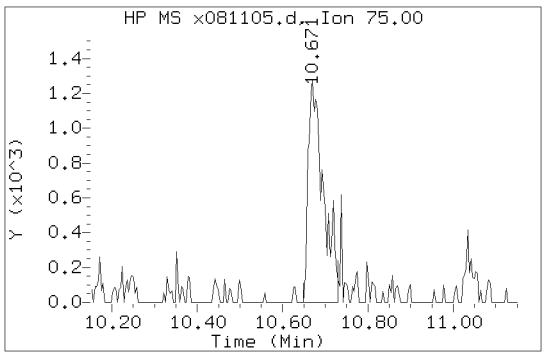
AFTER
MASS
157
AREA
3784
HEIGHT
2019
12-Aug-2023
22:50



BEFORE
MASS
75
AREA
3145
HEIGHT
1273
12-Aug-2023
22:50



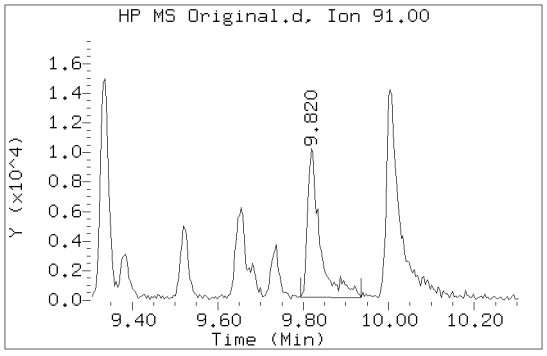
AFTER
MASS
75
AREA
3145
HEIGHT
1273
12-Aug-2023
22:50



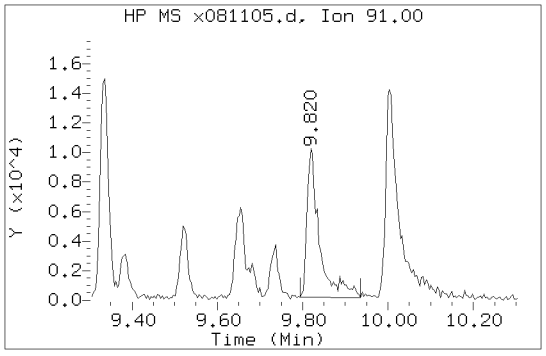
Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
20601
HEIGHT
10087
12-Aug-2023
22:50



AFTER
MASS
91
AREA
20601
HEIGHT
10087
12-Aug-2023
22:50

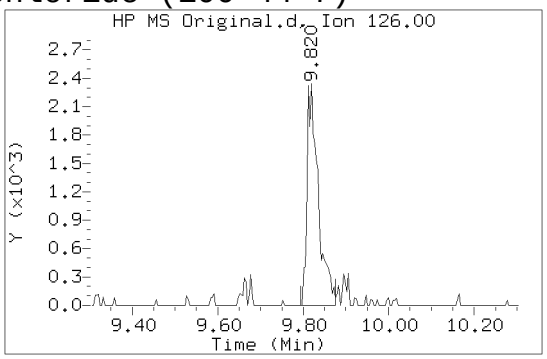


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InstruID : voa6.i
LabSampID : VSTD002

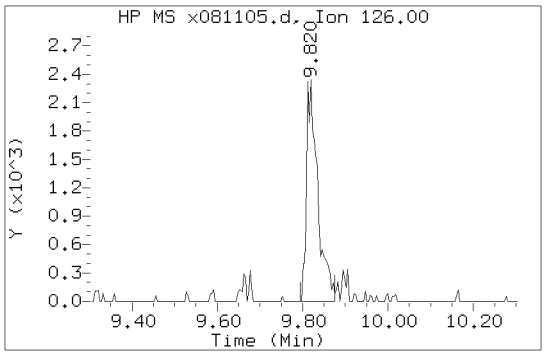
Benzyl Chloride (100-44-7)

Reason Code:

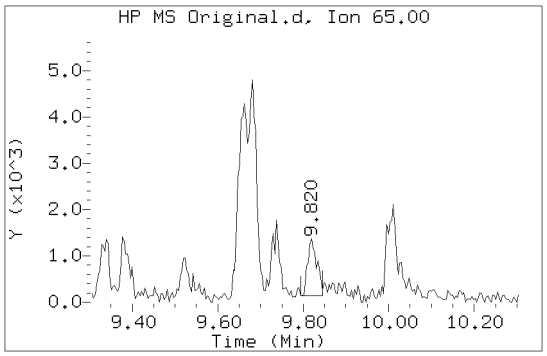
BEFORE
MASS
126
AREA
4278
HEIGHT
2343
12-Aug-2023
22:50



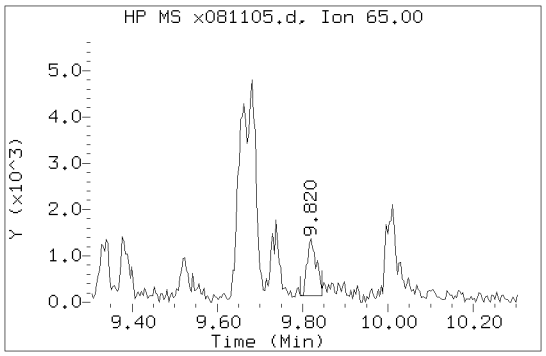
AFTER
MASS
126
AREA
4278
HEIGHT
2343
12-Aug-2023
22:50



BEFORE
MASS
65
AREA
1885
HEIGHT
1244
12-Aug-2023
22:50



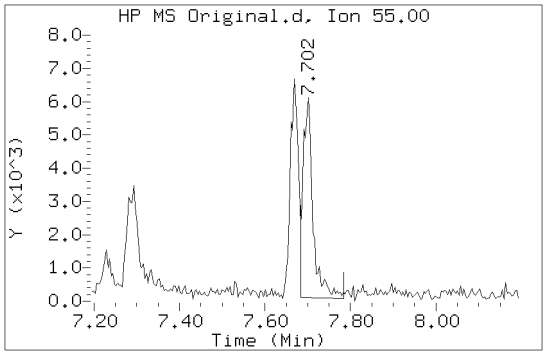
AFTER
MASS
65
AREA
1885
HEIGHT
1244
12-Aug-2023
22:50



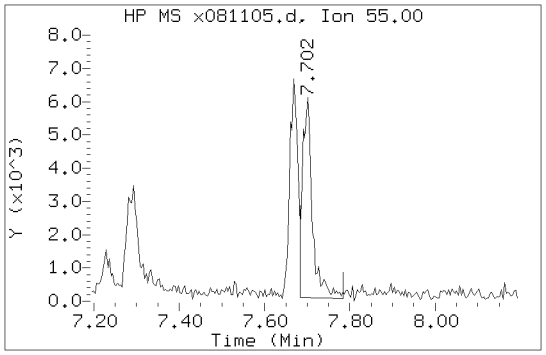
1-Chlorohexane (544-10-5)

Reason Code:

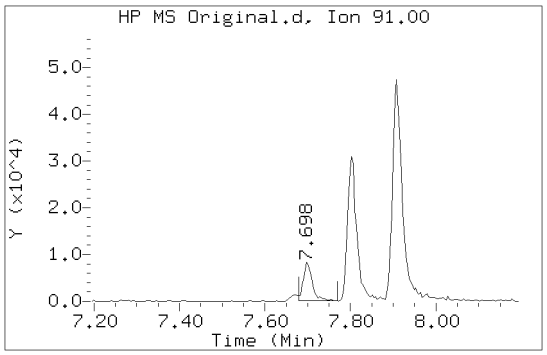
BEFORE
MASS
55
AREA
10090
HEIGHT
6010
12-Aug-2023
22:50



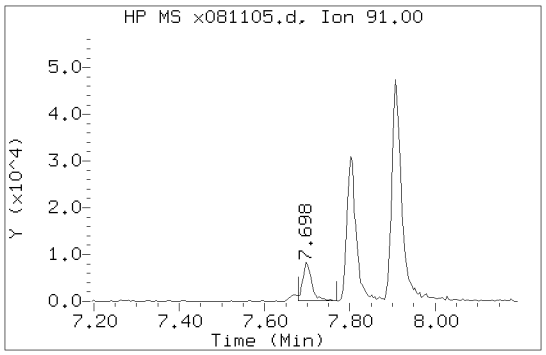
AFTER
MASS
55
AREA
10090
HEIGHT
6010
12-Aug-2023
22:50



BEFORE
MASS
91
AREA
12460
HEIGHT
8258
12-Aug-2023
22:50



AFTER
MASS
91
AREA
12460
HEIGHT
8258
12-Aug-2023
22:50

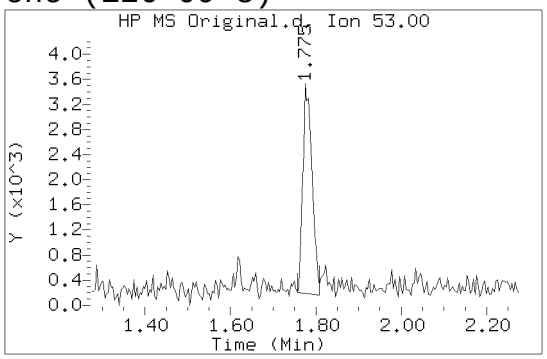


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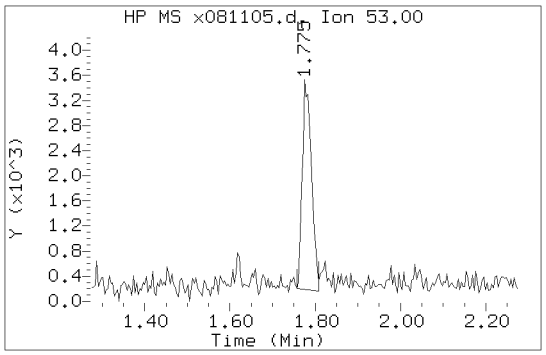
Chloroprene (126-99-8)

Reason Code:

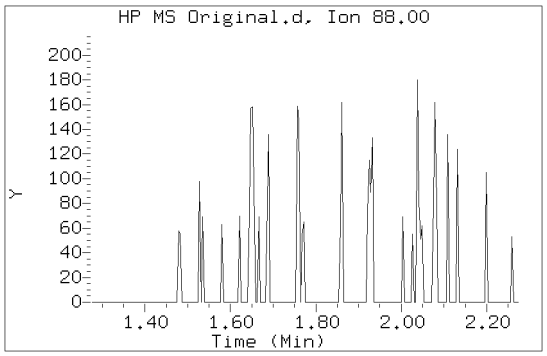
BEFORE
MASS
53
AREA
5152
HEIGHT
3336
12-Aug-2023
22:50



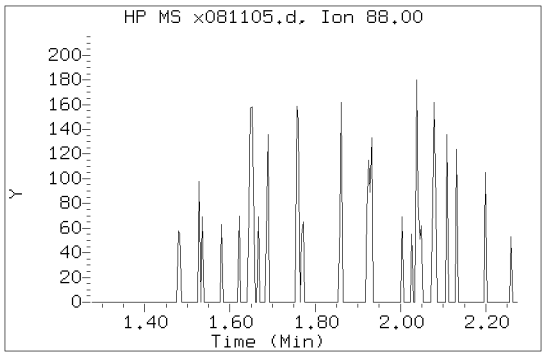
AFTER
MASS
53
AREA
5152
HEIGHT
3336
12-Aug-2023
22:50



BEFORE
MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:50



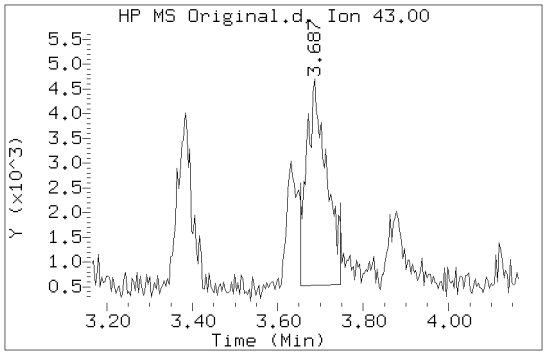
AFTER
MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:50



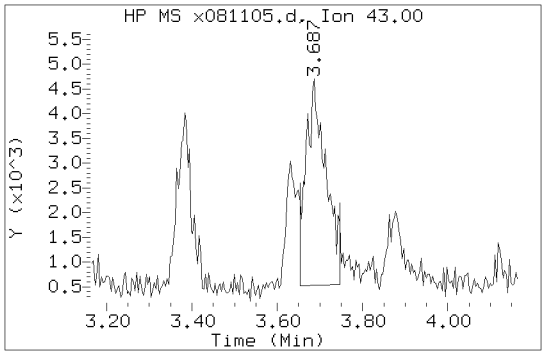
Ethyl Acetate (141-78-6)

Reason Code:

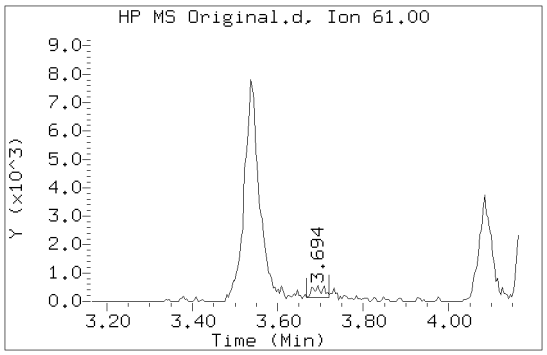
BEFORE
MASS
43
AREA
13837
HEIGHT
4173
12-Aug-2023
22:50



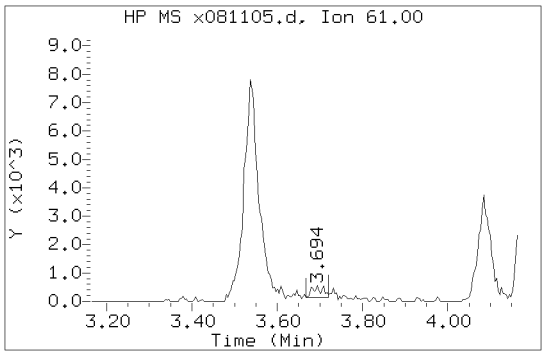
AFTER
MASS
43
AREA
13837
HEIGHT
4173
12-Aug-2023
22:50



BEFORE
MASS
61
AREA
724
HEIGHT
430
12-Aug-2023
22:50



AFTER
MASS
61
AREA
724
HEIGHT
430
12-Aug-2023
22:50

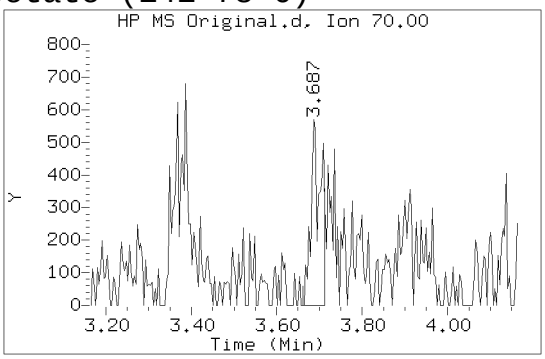


Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081105.d
Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

BEFORE

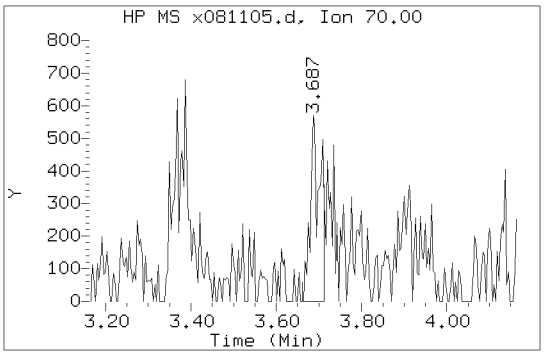
MASS
70
AREA
927
HEIGHT
571
12-Aug-2023
22:50



Reason Code:

AFTER

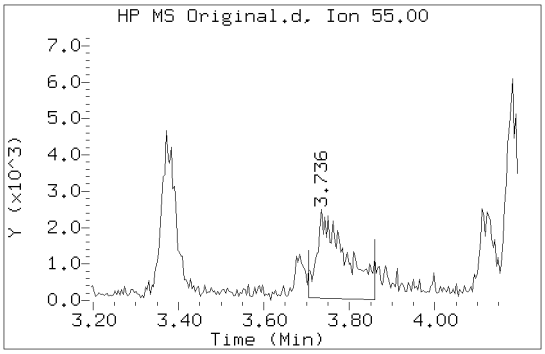
MASS
70
AREA
927
HEIGHT
571
12-Aug-2023
22:50



Methyl Acrylate (96-33-3)

BEFORE

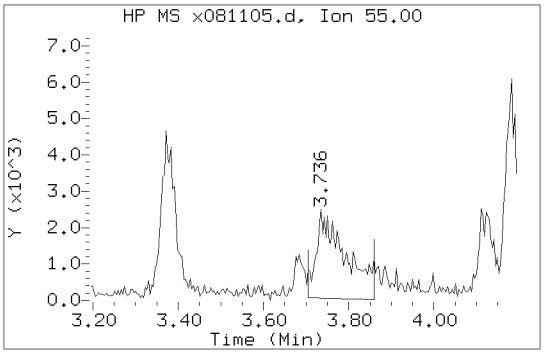
MASS
55
AREA
11619
HEIGHT
2443
12-Aug-2023
22:50



Reason Code:

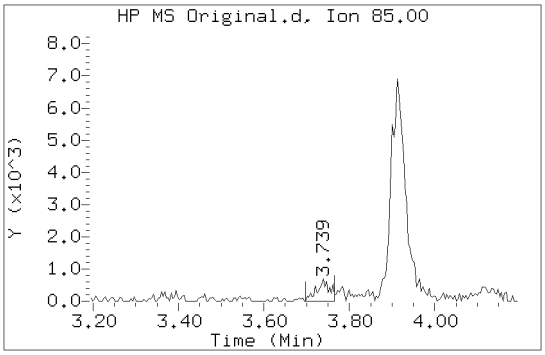
AFTER

MASS
55
AREA
11619
HEIGHT
2443
12-Aug-2023
22:50



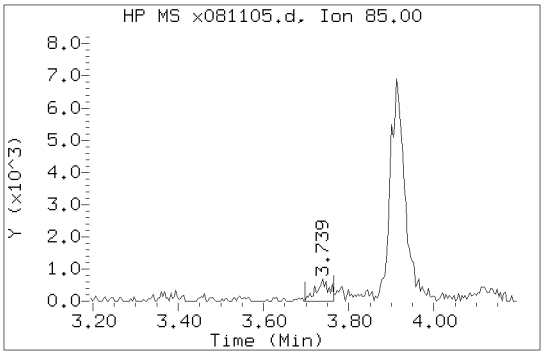
BEFORE

MASS
85
AREA
1393
HEIGHT
703
12-Aug-2023
22:50



AFTER

MASS
85
AREA
1393
HEIGHT
703
12-Aug-2023
22:50

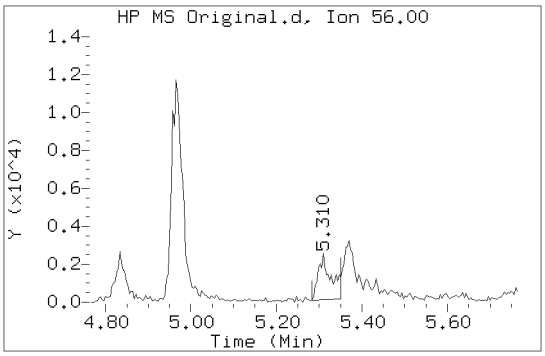


n-Butanol (71-36-3)

Reason Code:

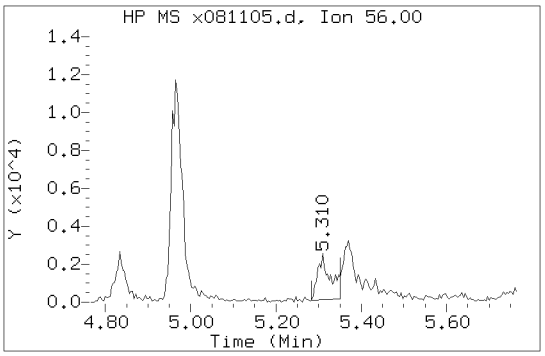
BEFORE

MASS
56
AREA
5108
HEIGHT
2438
12-Aug-2023
22:50



AFTER

MASS
56
AREA
5108
HEIGHT
2438
12-Aug-2023
22:50

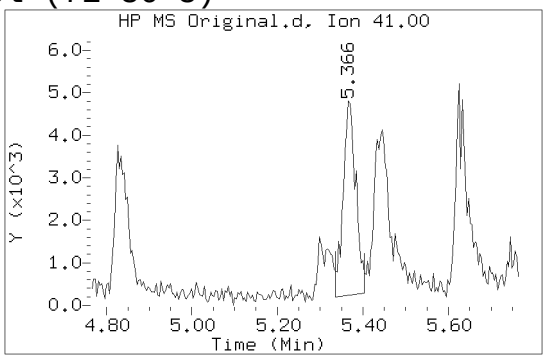


Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081105.d
Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

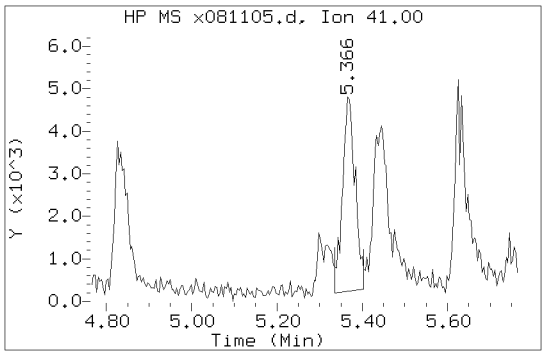
n-Butanol (71-36-3)

Reason Code:

BEFORE
MASS
41
AREA
9405
HEIGHT
4564
12-Aug-2023
22:50



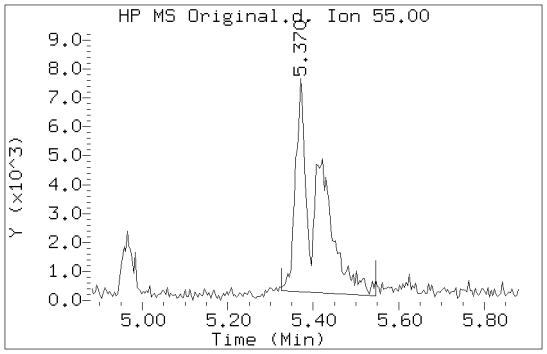
AFTER
MASS
41
AREA
9405
HEIGHT
4564
12-Aug-2023
22:50



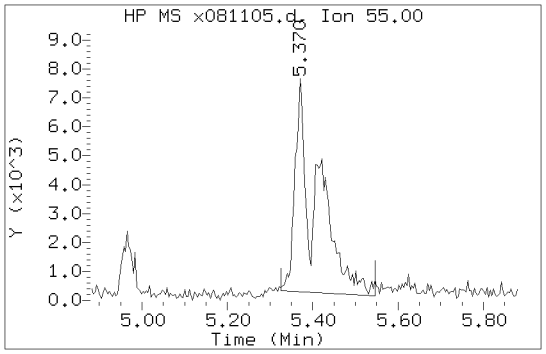
Ethyl Acrylate (140-88-5)

Reason Code:

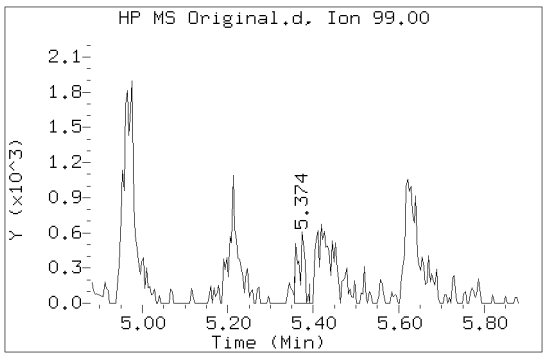
BEFORE
MASS
55
AREA
26539
HEIGHT
7374
12-Aug-2023
22:50



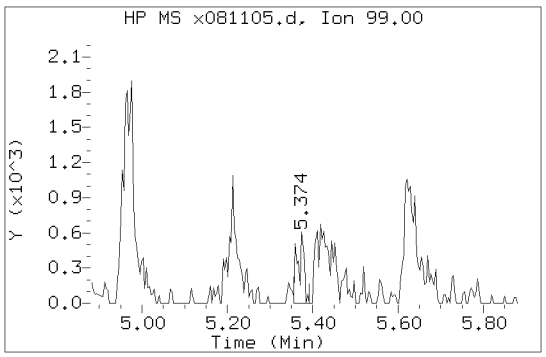
AFTER
MASS
55
AREA
26539
HEIGHT
7374
12-Aug-2023
22:50



BEFORE
MASS
99
AREA
657
HEIGHT
611
12-Aug-2023
22:50



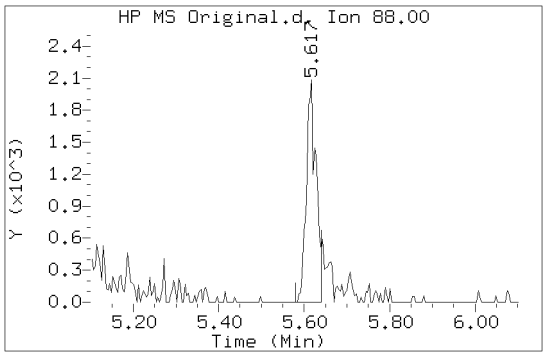
AFTER
MASS
99
AREA
657
HEIGHT
611
12-Aug-2023
22:50



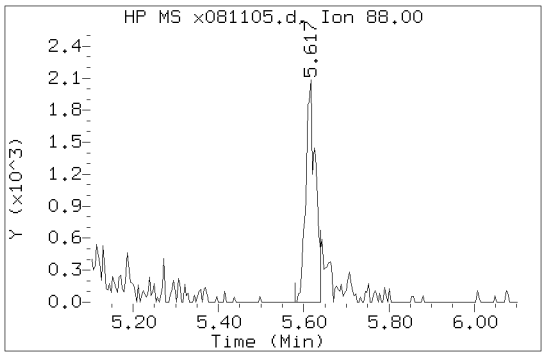
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
3316
HEIGHT
2084
12-Aug-2023
22:50



AFTER
MASS
88
AREA
3316
HEIGHT
2084
12-Aug-2023
22:50



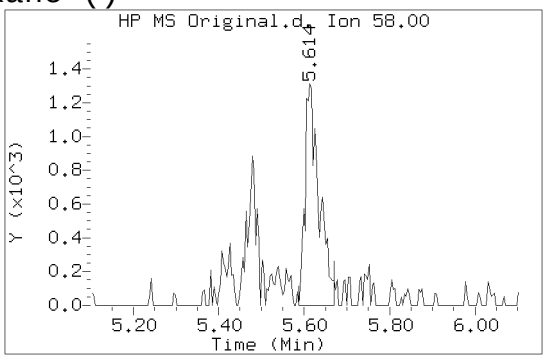
Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081105.d
Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

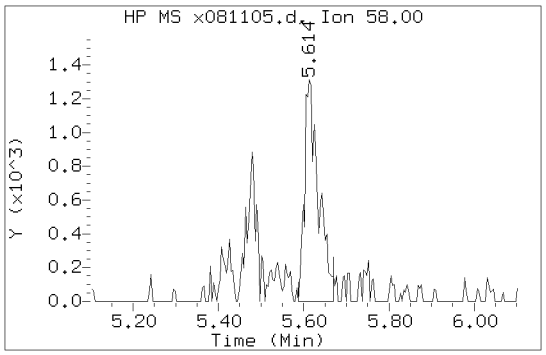
BEFORE

MASS
58
AREA
3025
HEIGHT
1313
12-Aug-2023
22:50



AFTER

MASS
58
AREA
3025
HEIGHT
1313
12-Aug-2023
22:50

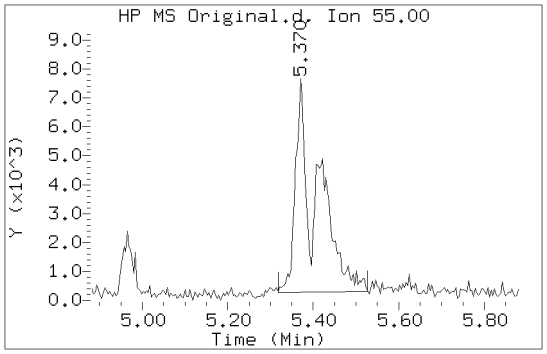


Methylcyclohexane (108-87-2)

Reason Code:

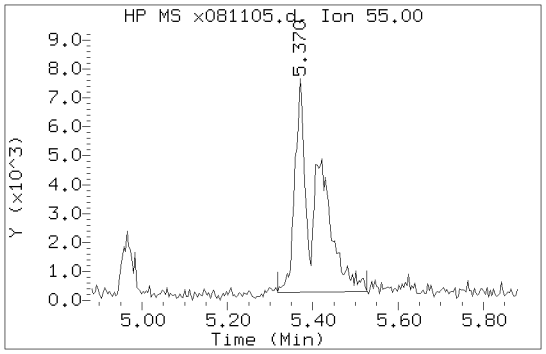
BEFORE

MASS
55
AREA
25754
HEIGHT
7389
12-Aug-2023
22:50



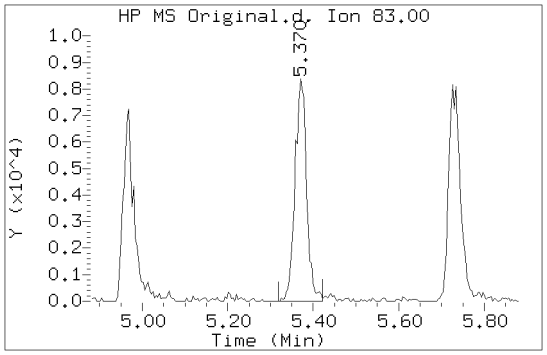
AFTER

MASS
55
AREA
25754
HEIGHT
7389
12-Aug-2023
22:50



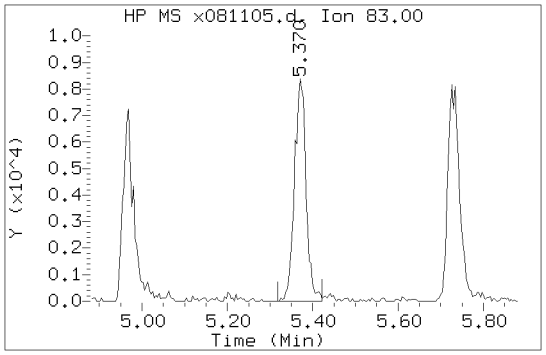
BEFORE

MASS
83
AREA
16064
HEIGHT
8380
12-Aug-2023
22:50



AFTER

MASS
83
AREA
16064
HEIGHT
8380
12-Aug-2023
22:50

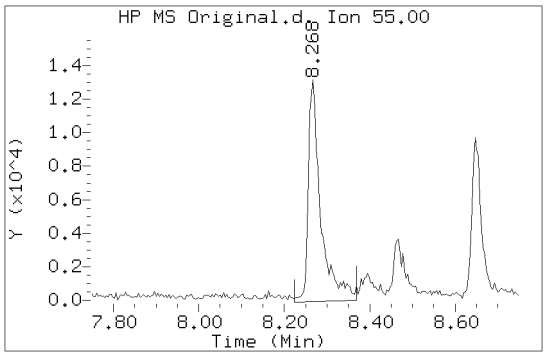


Butyl acrylate (141-32-2)

Reason Code:

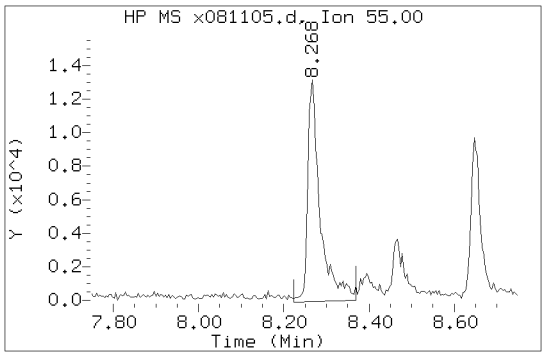
BEFORE

MASS
55
AREA
27159
HEIGHT
13237
12-Aug-2023
22:50



AFTER

MASS
55
AREA
27159
HEIGHT
13237
12-Aug-2023
22:50



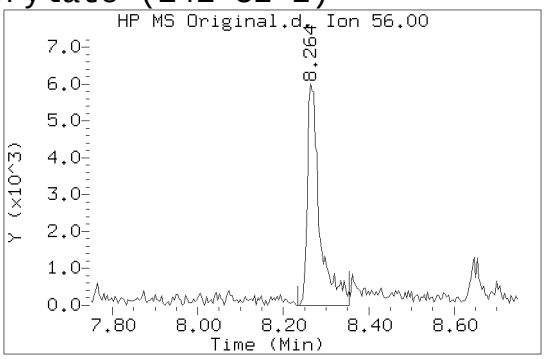
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Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

Butyl acrylate (141-32-2)

Reason Code:

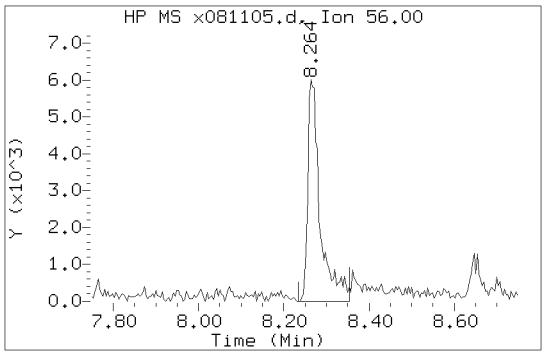
BEFORE

MASS
56
AREA
12093
HEIGHT
6013
12-Aug-2023
22:50



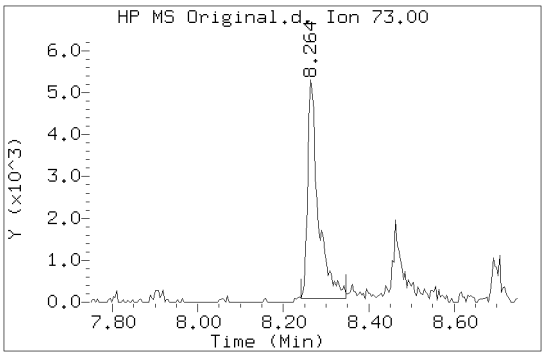
AFTER

MASS
56
AREA
12093
HEIGHT
6013
12-Aug-2023
22:50



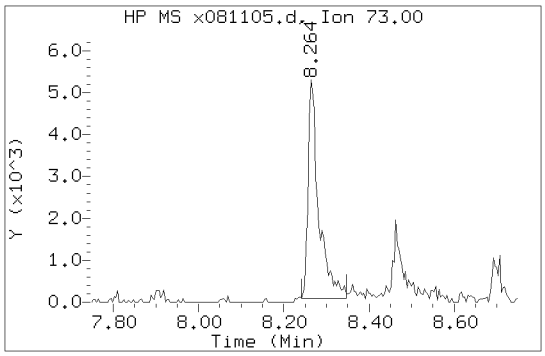
BEFORE

MASS
73
AREA
9106
HEIGHT
5215
12-Aug-2023
22:50



AFTER

MASS
73
AREA
9106
HEIGHT
5215
12-Aug-2023
22:50

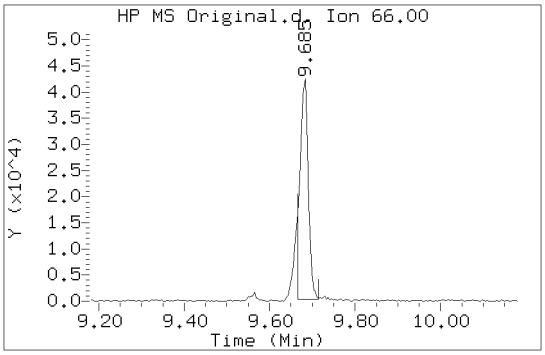


Dicyclopentadiene (77-73-6)

Reason Code:

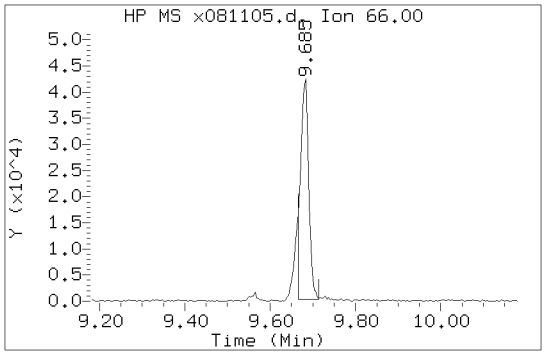
BEFORE

MASS
66
AREA
58027
HEIGHT
42184
12-Aug-2023
22:50



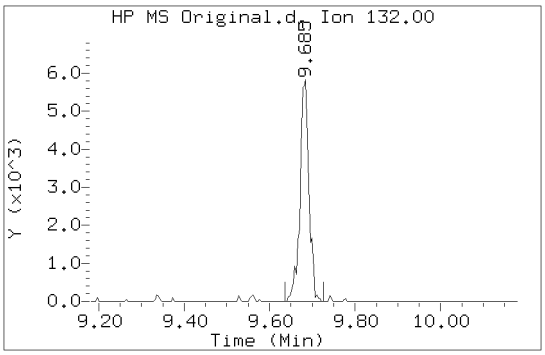
AFTER

MASS
66
AREA
58027
HEIGHT
42184
12-Aug-2023
22:50



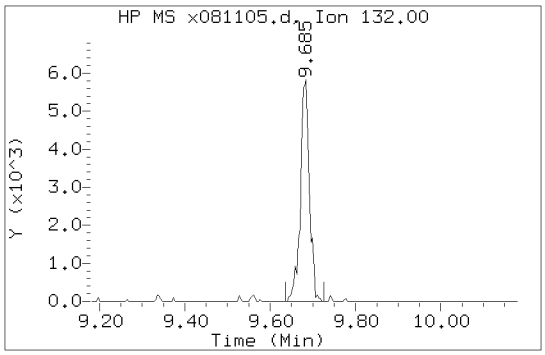
BEFORE

MASS
132
AREA
8811
HEIGHT
5829
12-Aug-2023
22:50



AFTER

MASS
132
AREA
8811
HEIGHT
5829
12-Aug-2023
22:50

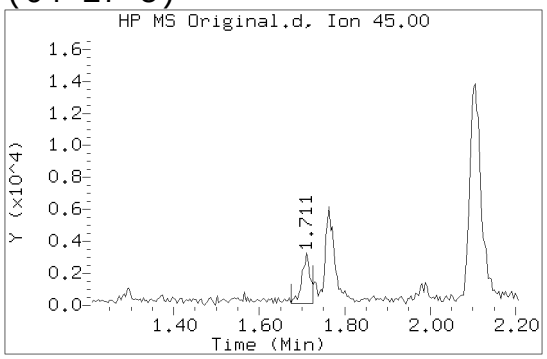


Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081105.d
Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

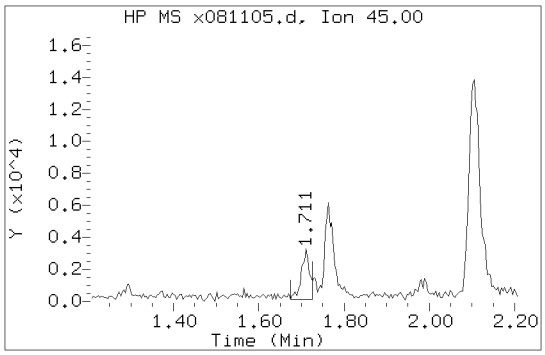
Ethanol (64-17-5)

Reason Code:

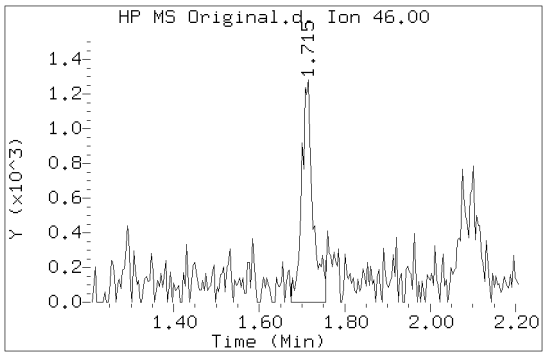
BEFORE
MASS
45
AREA
4283
HEIGHT
3166
12-Aug-2023
22:50



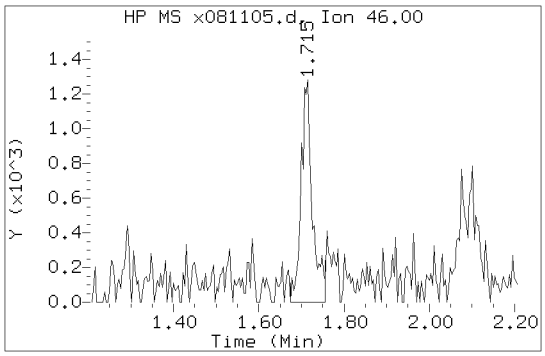
AFTER
MASS
45
AREA
4283
HEIGHT
3166
12-Aug-2023
22:50



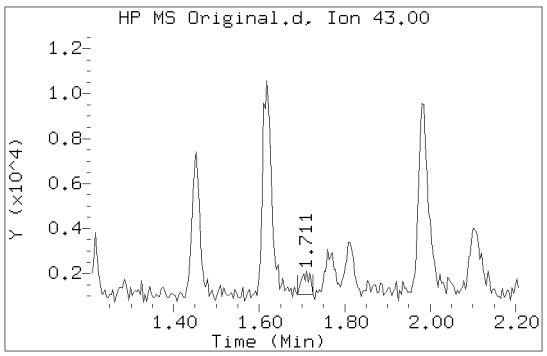
BEFORE
MASS
46
AREA
2377
HEIGHT
1281
12-Aug-2023
22:50



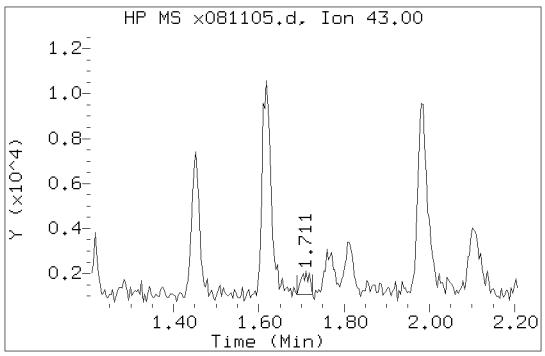
AFTER
MASS
46
AREA
2377
HEIGHT
1281
12-Aug-2023
22:50



BEFORE
MASS
43
AREA
1396
HEIGHT
1053
12-Aug-2023
22:50



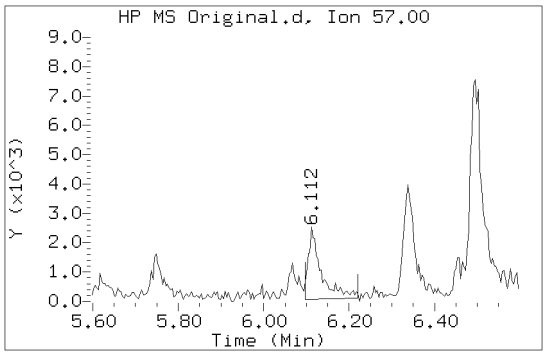
AFTER
MASS
43
AREA
1396
HEIGHT
1053
12-Aug-2023
22:50



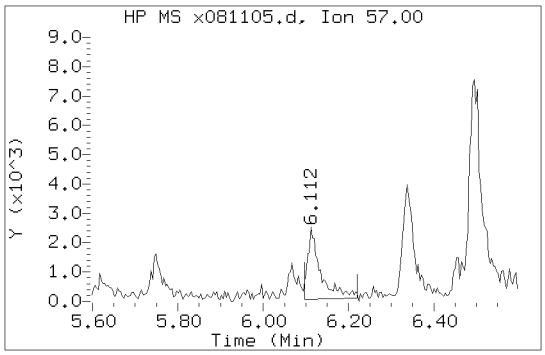
Epichlorohydrin (106-89-8)

Reason Code:

BEFORE
MASS
57
AREA
5186
HEIGHT
2456
12-Aug-2023
22:50



AFTER
MASS
57
AREA
5186
HEIGHT
2456
12-Aug-2023
22:50



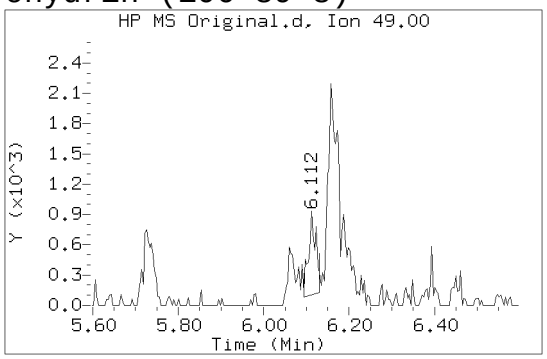
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Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

Epichlorohydrin (106-89-8)

Reason Code:

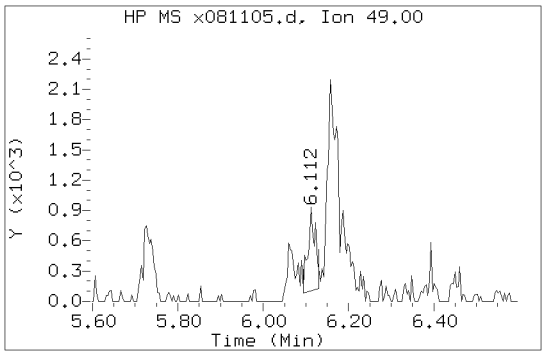
BEFORE

MASS
49
AREA
1009
HEIGHT
831
12-Aug-2023
22:50



AFTER

MASS
49
AREA
1009
HEIGHT
831
12-Aug-2023
22:50

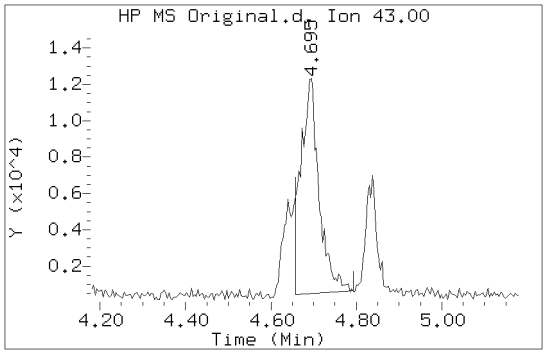


Isopropyl acetate (108-21-4)

Reason Code:

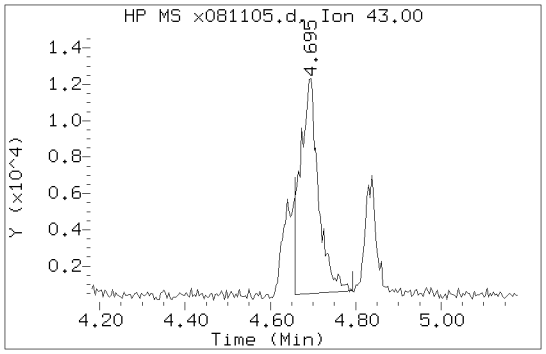
BEFORE

MASS
43
AREA
35340
HEIGHT
11814
12-Aug-2023
22:50



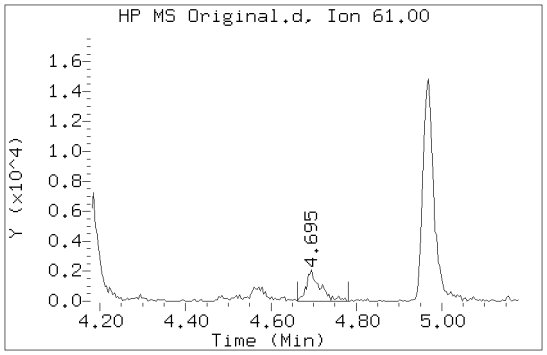
AFTER

MASS
43
AREA
35340
HEIGHT
11814
12-Aug-2023
22:50



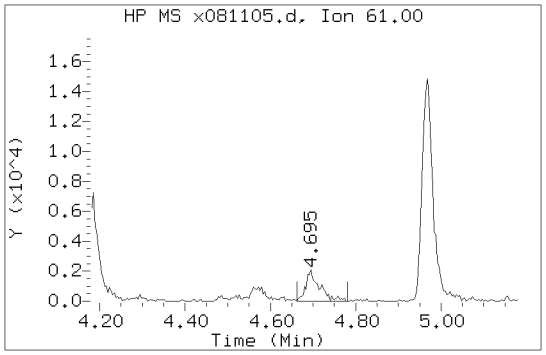
BEFORE

MASS
61
AREA
4677
HEIGHT
2089
12-Aug-2023
22:50



AFTER

MASS
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AREA
4677
HEIGHT
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12-Aug-2023
22:50

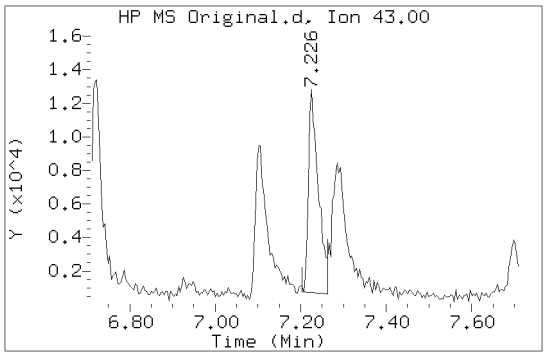


n-Butyl acetate (123-86-4)

Reason Code:

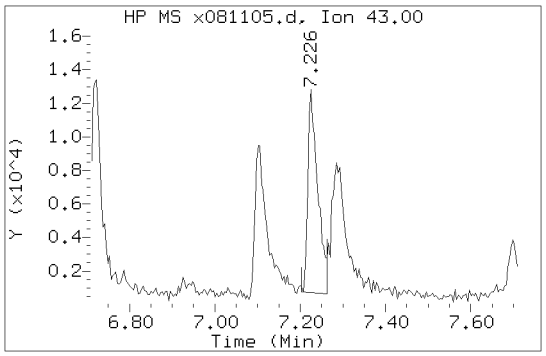
BEFORE

MASS
43
AREA
19611
HEIGHT
12109
12-Aug-2023
22:50



AFTER

MASS
43
AREA
19611
HEIGHT
12109
12-Aug-2023
22:50

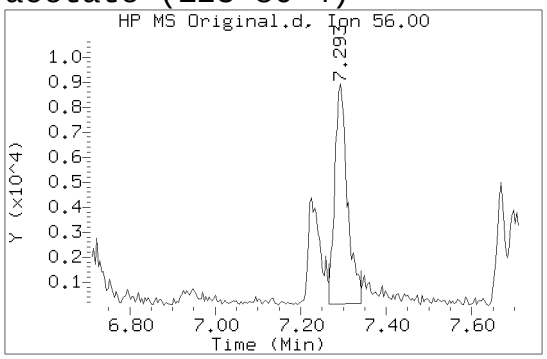


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InstruID : voa6.i
LabSampID : VSTD002

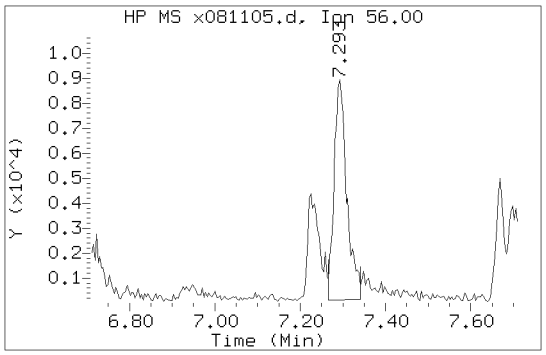
n-Butyl acetate (123-86-4)

Reason Code:

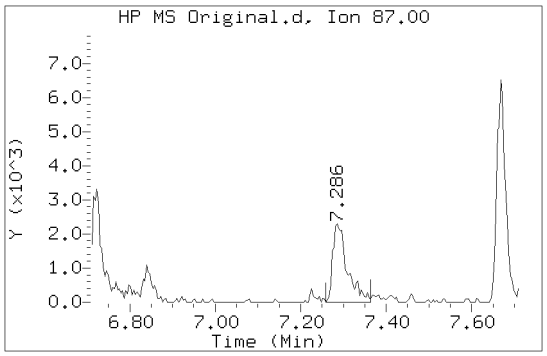
BEFORE
MASS
56
AREA
18305
HEIGHT
8813
12-Aug-2023
22:50



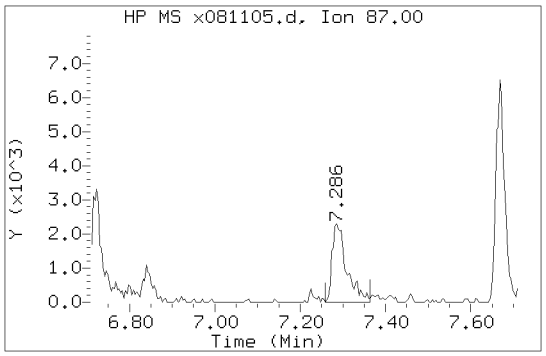
AFTER
MASS
56
AREA
18305
HEIGHT
8813
12-Aug-2023
22:50



BEFORE
MASS
87
AREA
5438
HEIGHT
2305
12-Aug-2023
22:50



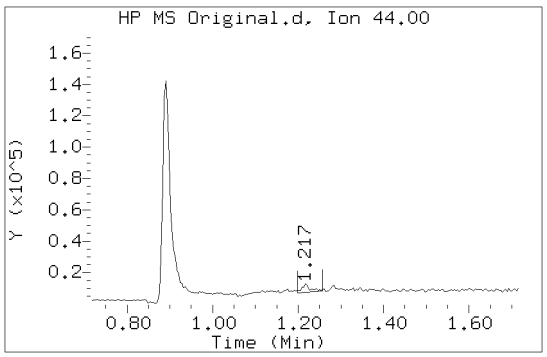
AFTER
MASS
87
AREA
5438
HEIGHT
2305
12-Aug-2023
22:50



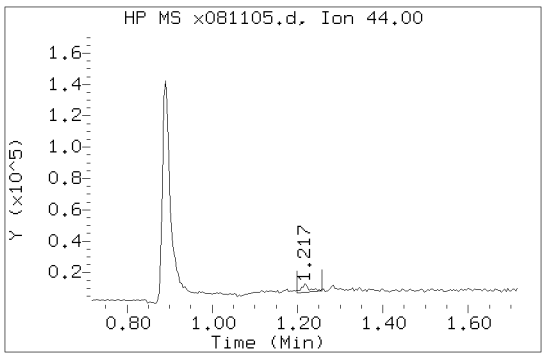
Acetaldehyde (75-07-0)

Reason Code:

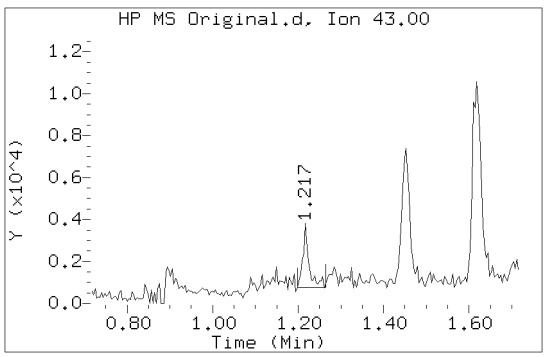
BEFORE
MASS
44
AREA
7566
HEIGHT
5442
12-Aug-2023
22:50



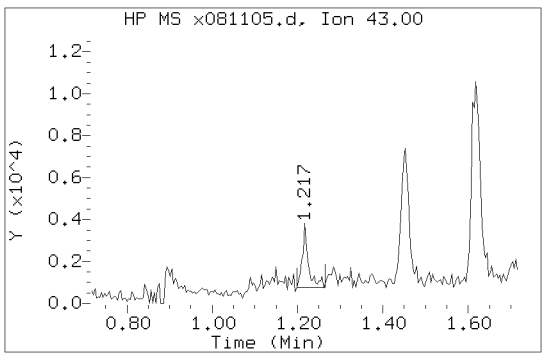
AFTER
MASS
44
AREA
7566
HEIGHT
5442
12-Aug-2023
22:50



BEFORE
MASS
43
AREA
3136
HEIGHT
3062
12-Aug-2023
22:50



AFTER
MASS
43
AREA
3136
HEIGHT
3062
12-Aug-2023
22:50

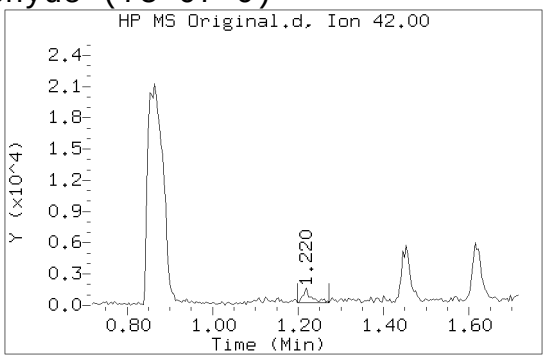


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Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

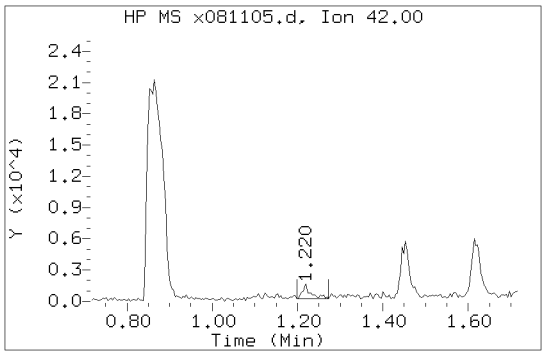
Acetaldehyde (75-07-0)

Reason Code:

BEFORE
MASS
42
AREA
1919
HEIGHT
1438
12-Aug-2023
22:50



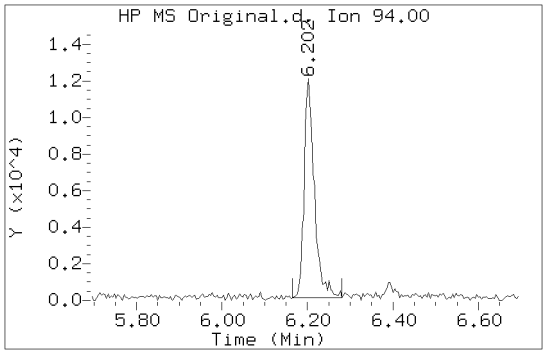
AFTER
MASS
42
AREA
1919
HEIGHT
1438
12-Aug-2023
22:50



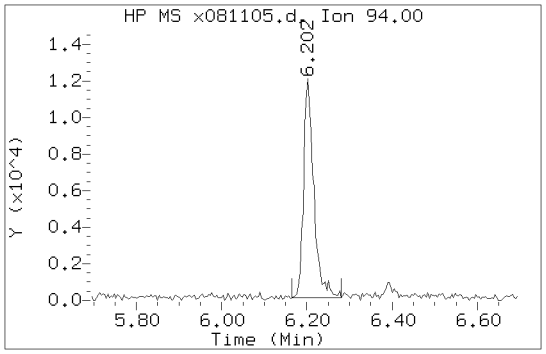
Dimethyl Disulfide (624-92-0)

Reason Code:

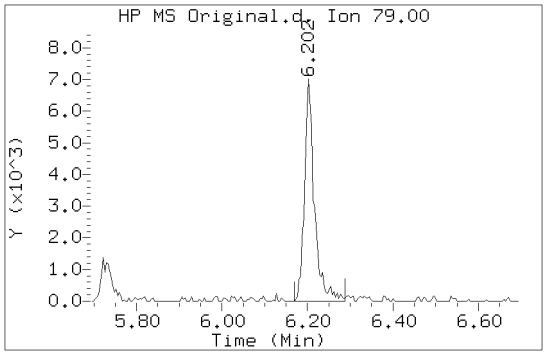
BEFORE
MASS
94
AREA
20404
HEIGHT
11992
12-Aug-2023
22:50



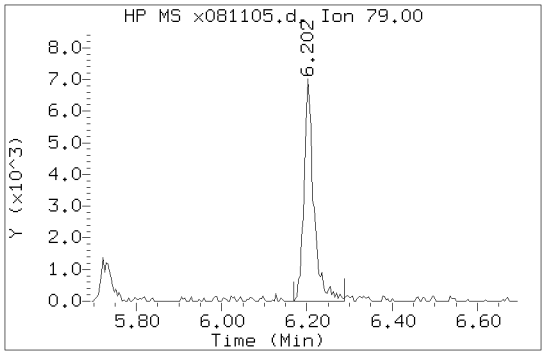
AFTER
MASS
94
AREA
20404
HEIGHT
11992
12-Aug-2023
22:50



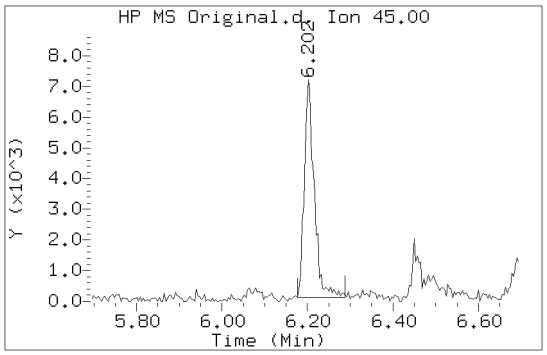
BEFORE
MASS
79
AREA
11430
HEIGHT
7017
12-Aug-2023
22:50



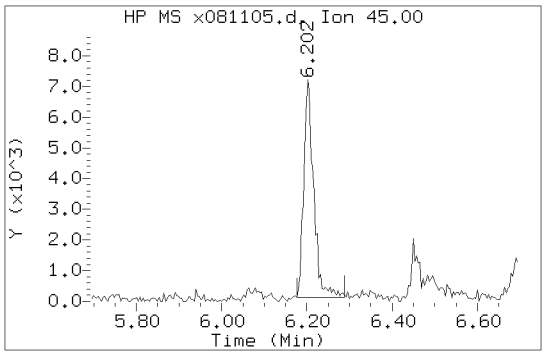
AFTER
MASS
79
AREA
11430
HEIGHT
7017
12-Aug-2023
22:50



BEFORE
MASS
45
AREA
11617
HEIGHT
7091
12-Aug-2023
22:50



AFTER
MASS
45
AREA
11617
HEIGHT
7091
12-Aug-2023
22:50

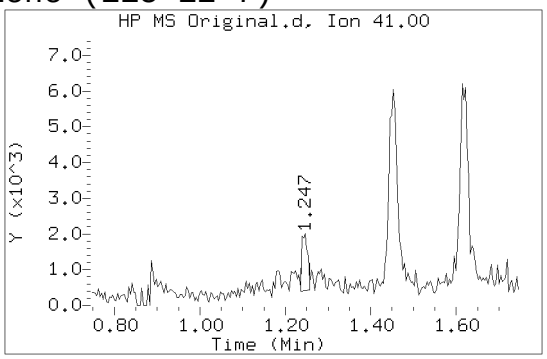


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Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

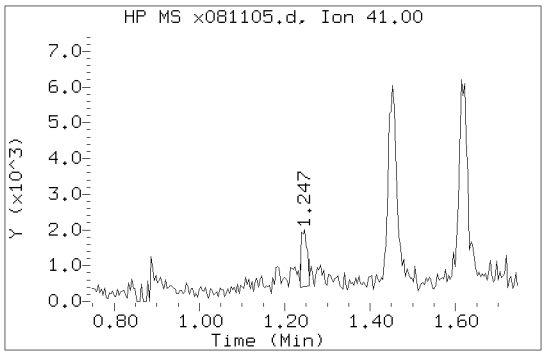
Isobutylene (115-11-7)

Reason Code:

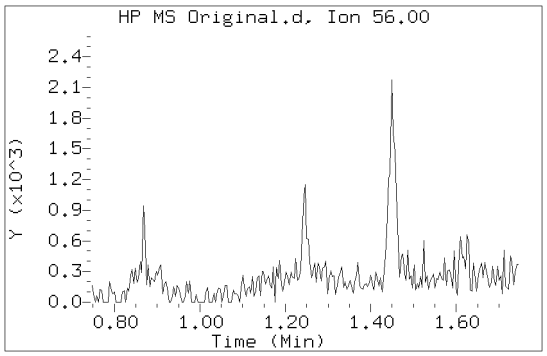
BEFORE
MASS
41
AREA
1584
HEIGHT
1603
12-Aug-2023
22:50



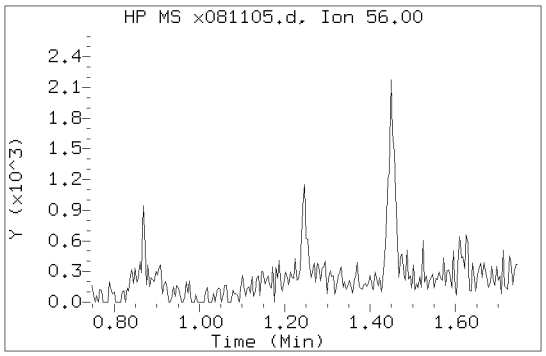
AFTER
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41
AREA
1584
HEIGHT
1603
12-Aug-2023
22:50



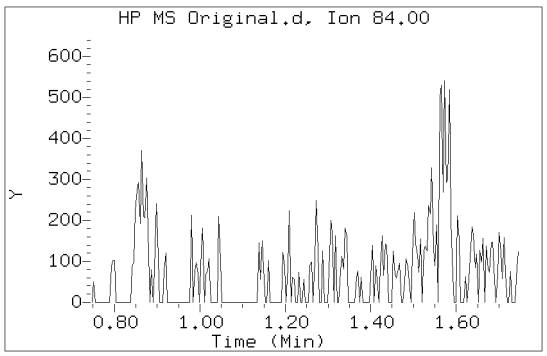
BEFORE
MASS
56
AREA
0
HEIGHT
0
12-Aug-2023
22:50



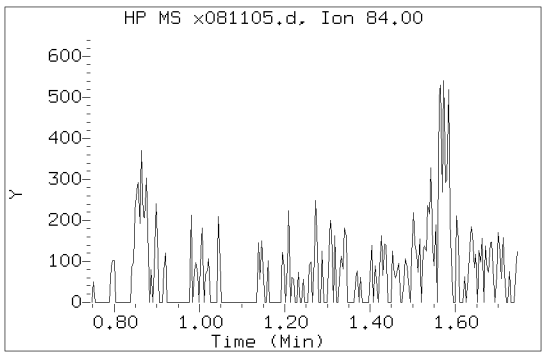
AFTER
MASS
56
AREA
0
HEIGHT
0
12-Aug-2023
22:50



BEFORE
MASS
84
AREA
0
HEIGHT
0
12-Aug-2023
22:50



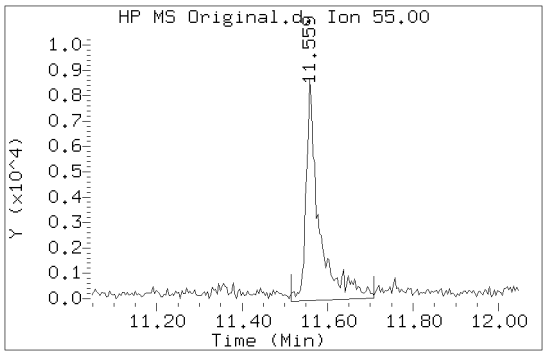
AFTER
MASS
84
AREA
0
HEIGHT
0
12-Aug-2023
22:50



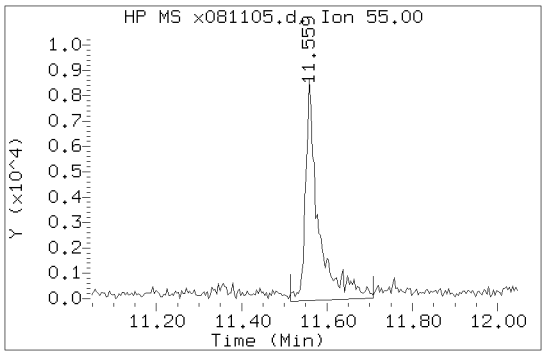
2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
55
AREA
18677
HEIGHT
8707
12-Aug-2023
22:50



AFTER
MASS
55
AREA
18677
HEIGHT
8707
12-Aug-2023
22:50



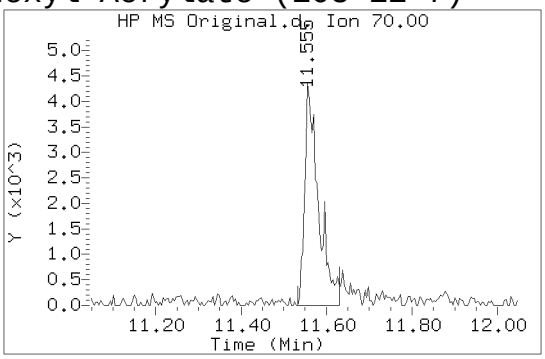
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Inj Date : 11-AUG-2023 12:55
InstruID : voa6.i
LabSampID : VSTD002

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

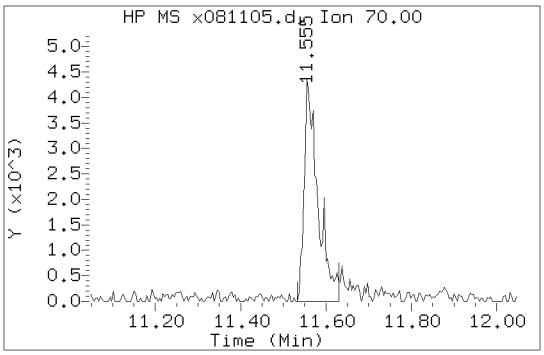
BEFORE

MASS
70
AREA
9767
HEIGHT
4350
12-Aug-2023
22:50



AFTER

MASS
70
AREA
9767
HEIGHT
4350
12-Aug-2023
22:50



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081106.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 11-AUG-2023 13:15
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 12:55 Cal File: X081105.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	594420	50.0000	
135 1,4-Dioxane	88	5.610	5.610	(1.342)	7471	100.000	98.88
140 1,3-Butadiene	54	1.171	1.171	(0.280)	29685	5.00000	4.84
25 Methacrylonitrile	41	3.859	3.859	(0.923)	30293	5.00000	5.10
12 Isobutyl Alcohol	43	4.691	4.691	(1.122)	90165	100.000	96.76
13 Acetonitrile	39	2.206	2.206	(0.528)	47382	50.0000	51.68
14 Allyl Chloride	41	2.210	2.210	(0.528)	96037	5.00000	5.30
4 Propionitrile	54	3.671	3.671	(0.878)	40524	50.0000	48.95
136 n-Hexane	57	2.779	2.779	(0.665)	32239	5.00000	5.64
72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	10412	5.00000	4.65(H)
194 Acetaldehyde	44	1.216	1.216	(0.291)	13449	20.0000	14.76(M)
23 Chloroprene	53	1.778	1.778	(0.425)	12759	5.00000	5.07(M)
145 alpha-Methylstyrene	118	9.261	9.261	(0.958)	49376	5.00000	4.66
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	53250	5.00000	4.55
139 Diethyl ether	59	1.767	1.767	(0.423)	27668	5.00000	5.27
130 Ethyl Acetate	43	3.679	3.679	(0.880)	35083	5.00000	5.14(M)
40 Methyl Methacrylate	41	5.621	5.621	(1.344)	27027	5.00000	4.94
49 Ethyl Methacrylate	69	6.790	6.790	(1.368)	39966	5.00000	4.66(H)
132 n-Butanol	56	5.287	5.287	(1.264)	9555	100.000	124.54(M)
142 Tetrahydrofuran	42	3.863	3.863	(0.924)	12547	10.0000	10.82

150	Allyl alcohol	57	2.779	2.779 (0.665)	32239	100.000	114.55
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	108618	5.00000	4.69

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081106.D Page 2
Report Date: 14-Aug-2023 16:51

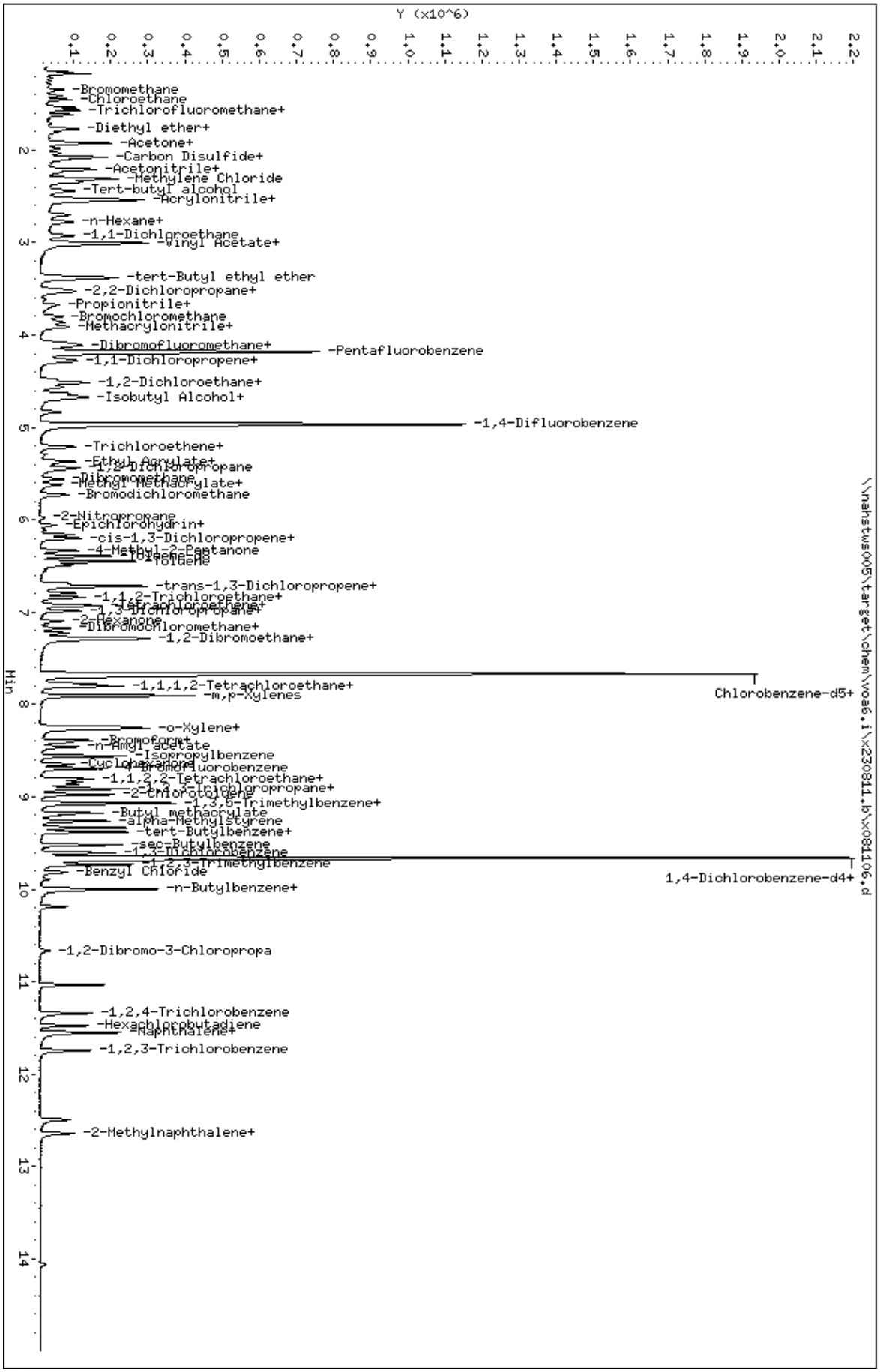
			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.724	3.724	(0.891)	30863	5.00000	5.25(M)
	162	Butyl acrylate	55	8.260	8.260	(1.077)	66548	5.00000	4.60
	2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	27672	5.00000	5.67
	3	Chloromethane	50	1.085	1.085	(0.260)	27627	5.00000	4.77
	5	Vinyl Chloride	62	1.149	1.149	(0.275)	35042	5.00000	4.91
	6	Bromomethane	94	1.347	1.347	(0.322)	18184	5.00000	4.73(M)
	7	Chloroethane	64	1.407	1.407	(0.337)	24167	5.00000	5.17(M)
	8	Trichlorofluoromethane	101	1.568	1.568	(0.375)	51010	5.00000	5.02
	9	Acrolein	56	1.872	1.872	(0.448)	2218	10.0000	8.95(H)
	10	Acetone	43	1.981	1.981	(0.474)	31794	10.0000	9.87
	11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	29363	5.00000	5.11
	15	Iodomethane	142	2.033	2.033	(0.486)	31977	10.0000	10.16(M)
	16	Acrylonitrile	53	2.543	2.543	(0.608)	29949	10.0000	10.83
	17	Methylene Chloride	84	2.311	2.311	(0.553)	42500	5.00000	5.90
	18	Methyl tert-butyl ether	73	2.543	2.543	(0.608)	105371	5.00000	5.14
	19	Carbon Disulfide	76	2.075	2.075	(0.496)	175609	10.0000	10.30
	20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.606)	34956	5.00000	5.24
	21	Vinyl Acetate	43	3.008	3.008	(0.719)	191764	10.0000	9.71
	22	1,1-Dichloroethane	63	2.926	2.926	(0.700)	63406	5.00000	5.04
	24	2-Butanone	43	3.608	3.608	(0.863)	21612	10.0000	9.82(MH)
	26	2,2-Dichloropropane	77	3.514	3.514	(0.840)	43583	5.00000	5.15
	27	cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	32964	5.00000	5.14
	28	Chloroform	83	3.908	3.908	(0.935)	57451	5.00000	5.21
	29	Bromochloromethane	128	3.803	3.803	(0.909)	18252	5.00000	5.01
$	30	Dibromofluoromethane	113	4.106	4.106	(0.982)	29825	5.00000	4.72
	31	1,1,1-Trichloroethane	97	4.084	4.084	(0.977)	45624	5.00000	5.16
	32	1,1-Dichloropropene	75	4.283	4.283	(0.863)	34061	5.00000	4.62(H)
	33	1,2-Dichloroethane	62	4.560	4.560	(0.918)	45033	5.00000	5.06
	34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	40297	5.00000	5.18(H)
$	35	1,2-Dichloroethane-d4	65	4.477	4.477	(1.071)	36656	5.00000	5.05
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	935678	50.0000	
	37	Benzene	78	4.519	4.519	(0.910)	116227	5.00000	5.04
	38	Trichloroethene	130	5.208	5.208	(1.049)	33156	5.00000	5.00
	39	Bromodichloromethane	83	5.729	5.729	(1.154)	42720	5.00000	4.97
	41	2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	20647	10.0000	9.40(M)
	42	1,2-Dichloropropane	63	5.441	5.441	(1.096)	31931	5.00000	4.91
	44	Dibromomethane	93	5.557	5.557	(1.119)	22599	5.00000	5.08
	45	4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	61249	10.0000	9.61
	46	cis-1,3-Dichloropropene	75	6.161	6.161	(1.241)	45506	5.00000	4.63
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	887704	50.0000	
$	48	Toluene-d8	98	6.389	6.389	(0.833)	111261	5.00000	5.32
	50	Toluene	91	6.449	6.449	(0.841)	123023	5.00000	4.97
	51	trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	37517	5.00000	4.55
	52	2-Hexanone	43	7.094	7.094	(0.925)	42251	10.0000	9.88
	53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	25267	5.00000	5.12
	54	1,3-Dichloropropane	76	6.985	6.985	(0.911)	50474	5.00000	5.00
	55	Dibromochloromethane	129	7.176	7.176	(0.936)	33839	5.00000	4.75
	56	Tetrachloroethene	164	6.929	6.929	(0.904)	25538	5.00000	4.96
	57	1,2-Dibromoethane	107	7.263	7.263	(0.947)	30653	5.00000	5.08
	58	1-Chlorohexane	55	7.698	7.698	(1.550)	25603	5.00000	4.72(H)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	84566	5.00000	4.96
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	32012	5.00000	4.86

61 Ethylbenzene	106	7.802	7.802 (1.018)	42883	5.00000	5.09
62 m,p-Xylenes	106	7.904	7.904 (1.031)	106798	10.0000	9.91

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	50948	5.00000	4.80
	64 Styrene	104	8.264	8.264	(1.078)	87288	5.00000	4.94
	66 Bromoform	173	8.414	8.414	(1.097)	21130	5.00000	4.40
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	126049	5.00000	4.78
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	39255	5.00000	4.84
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	49251	5.00000	5.86
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	498083	50.0000	
	71 1,2,3-Trichloropropane	75	8.867	8.867	(0.918)	29259	5.00000	4.90
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	141584	5.00000	4.80
	74 Bromobenzene	156	8.811	8.811	(0.912)	40340	5.00000	5.06
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	102042	5.00000	4.73
	76 2-Chlorotoluene	91	8.976	8.976	(0.929)	94293	5.00000	5.00
	77 4-Chlorotoluene	91	9.073	9.073	(0.939)	105626	5.00000	4.86
	78 tert-Butylbenzene	119	9.336	9.336	(0.966)	90504	5.00000	4.90
	79 1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	106167	5.00000	4.78
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	122941	5.00000	4.86
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	107020	5.00000	4.68
	83 1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	69705	5.00000	4.91
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	77053	5.00000	5.07
	86 Benzyl Chloride	91	9.812	9.812	(1.280)	49451	5.00000	3.89
	87 n-Butylbenzene	91	9.999	9.999	(1.035)	92255	5.00000	5.99
	88 1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	70556	5.00000	4.92
	89 1,2-Dibromo-3-Chloropropane	155	10.663	10.663	(1.104)	6669	5.00000	4.86
	90 1,2,4-Trichlorobenzene	180	11.341	11.341	(1.174)	44585	5.00000	4.70
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	18865	5.00000	5.42
	92 Naphthalene	128	11.551	11.551	(1.196)	109297	5.00000	4.62
	93 1,2,3-Trichlorobenzene	180	11.746	11.746	(1.216)	43073	5.00000	4.66
M	94 1,2-Dichloroethylene (total)	96				67920	10.0000	
M	95 Xylenes (total)	106				157746	15.0000	
	141 Cyclohexane	56	4.121	4.121	(0.986)	36420	5.00000	6.24(H)
	138 Freon TF	101	1.921	1.921	(0.459)	27608	5.00000	5.95
	147 Methylcyclohexane	55	5.400	5.400	(1.088)	65554	5.00000	4.66(M)
	146 Methyl Acetate	43	2.240	2.240	(0.536)	26540	5.00000	4.96
	148 Tert-Butyl alcohol	59	2.442	2.442	(0.584)	82288	100.000	103.36
	149 Isopropyl Alcohol	45	2.101	2.101	(0.502)	46061	100.000	98.92

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Date : 11-AUG-2023 13:15
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

\\nahstws005\target\chem\voa6.i\x230811.b\x081106.d

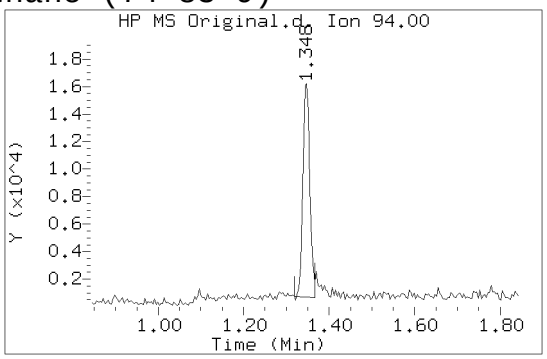
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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LabSampID : VSTD005

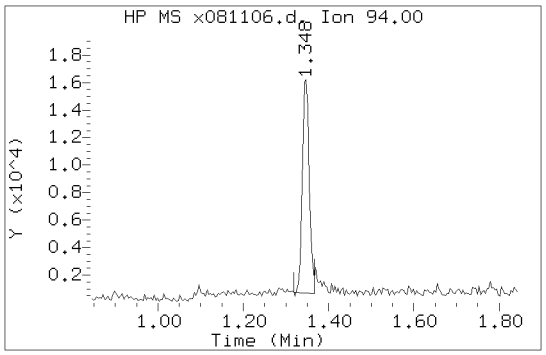
Bromomethane (74-83-9)

Reason Code:

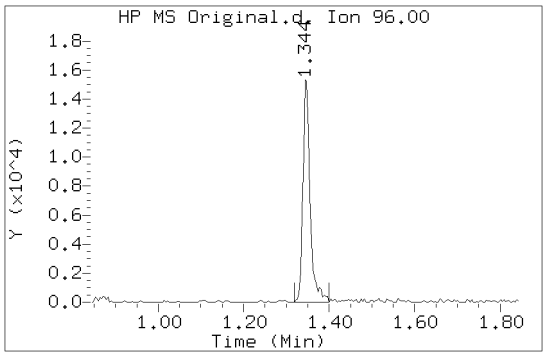
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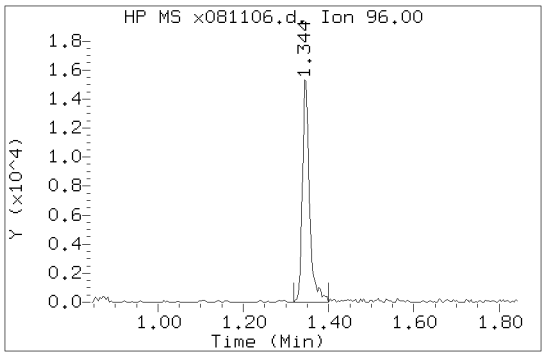
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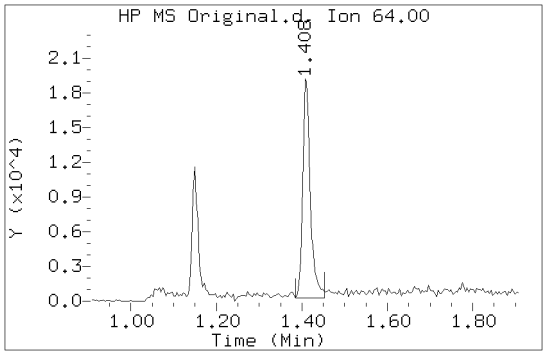
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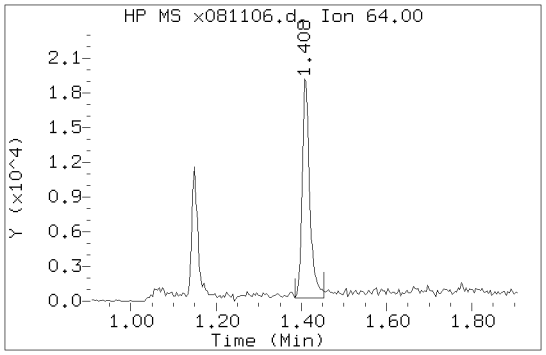
Chloroethane (75-00-3)

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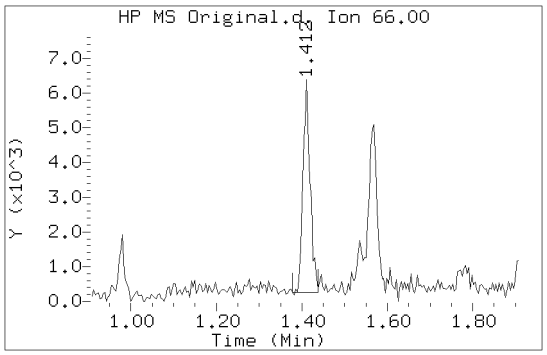
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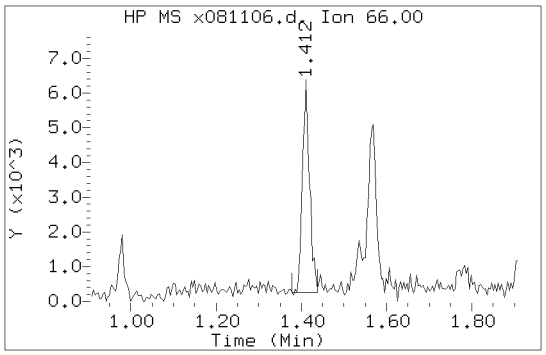
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22:49



BEFORE
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AFTER
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12-Aug-2023
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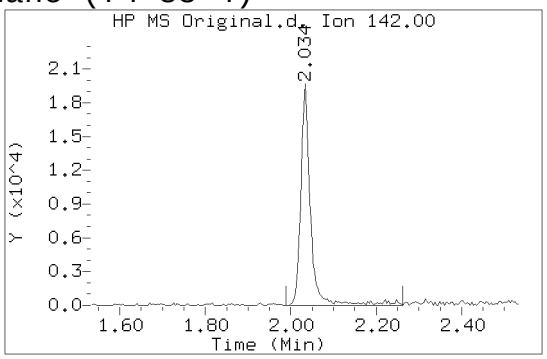


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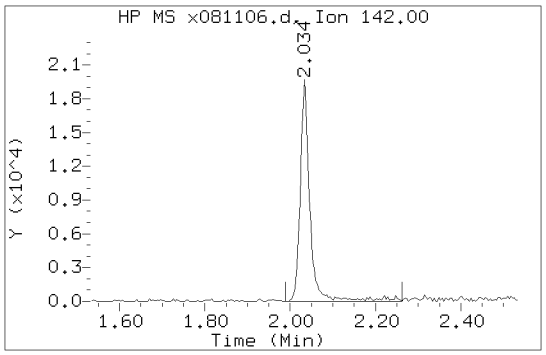
Iodomethane (74-88-4)

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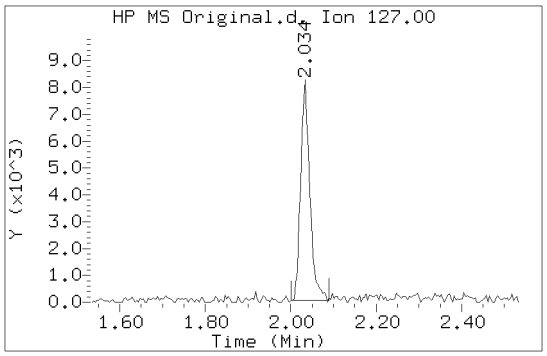
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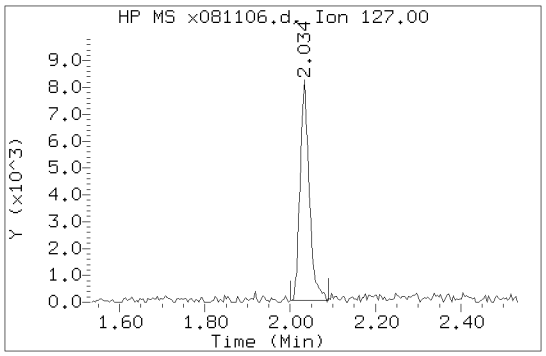
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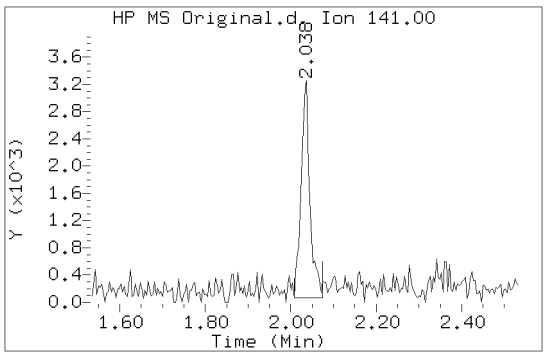
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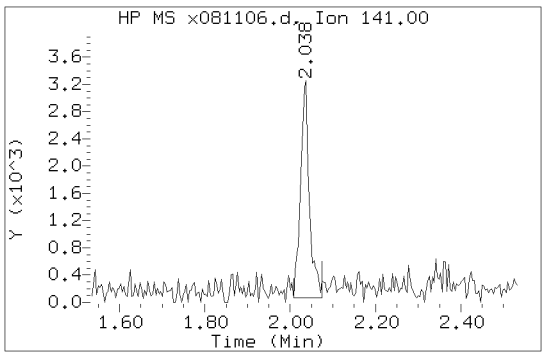
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12-Aug-2023
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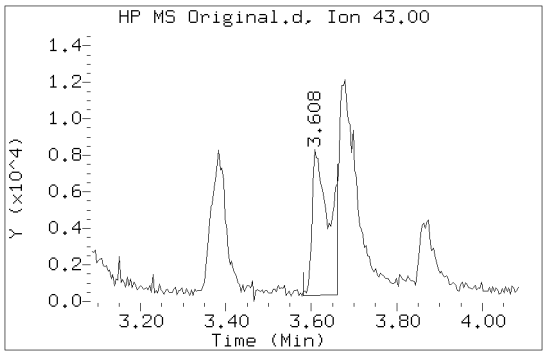
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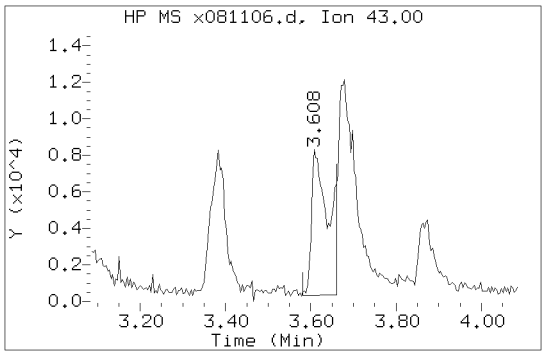
2-Butanone (78-93-3)

Reason Code:

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AFTER
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12-Aug-2023
22:49

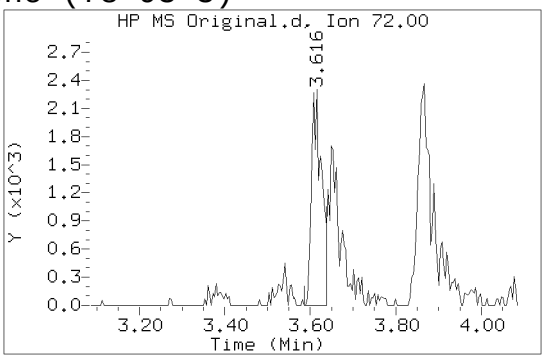


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InstruID : voa6.i
LabSampID : VSTD005

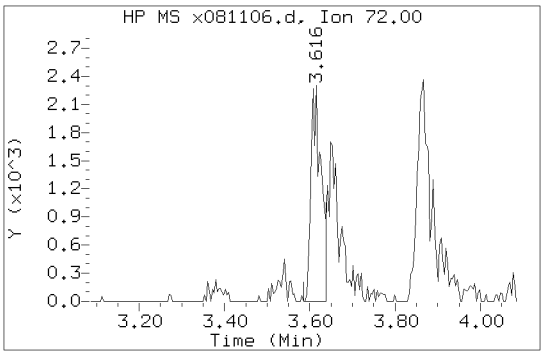
2-Butanone (78-93-3)

Reason Code:

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12-Aug-2023
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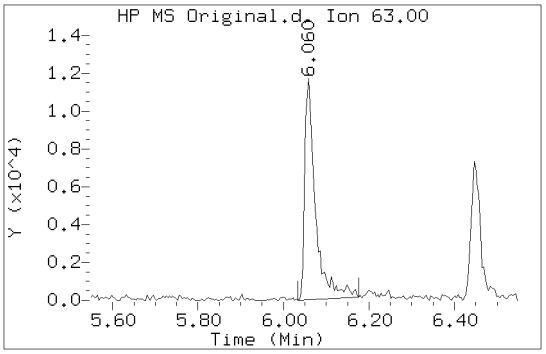
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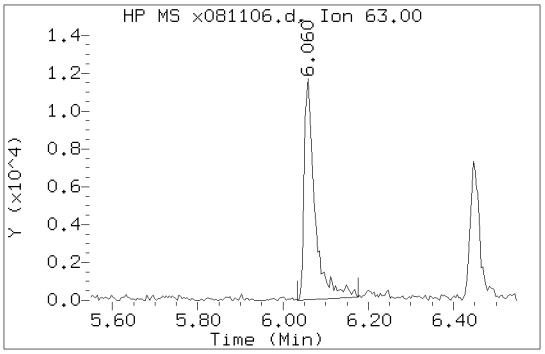
2-Chloroethylvinyl ether (110-75-8)

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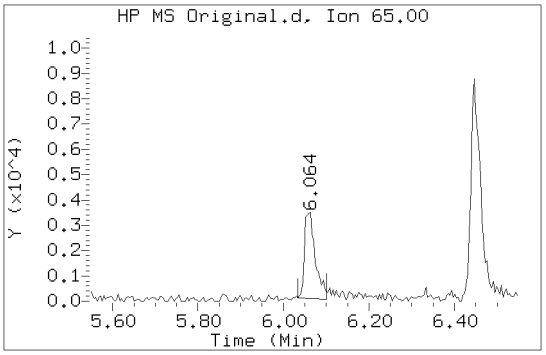
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12-Aug-2023
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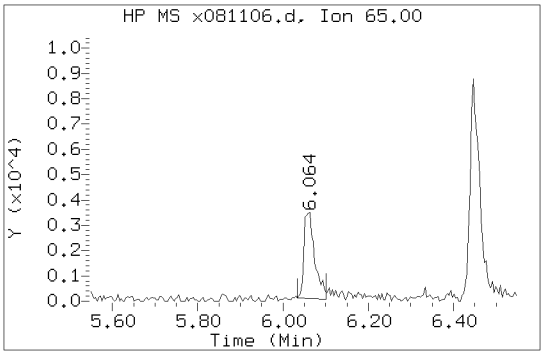
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12-Aug-2023
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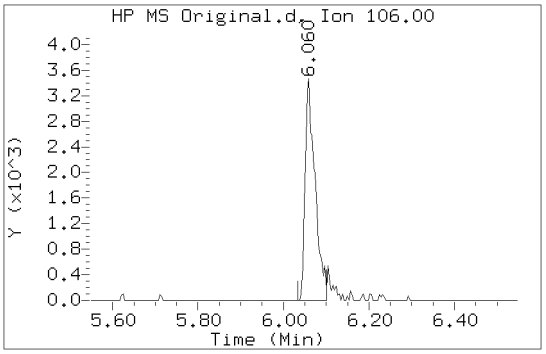
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12-Aug-2023
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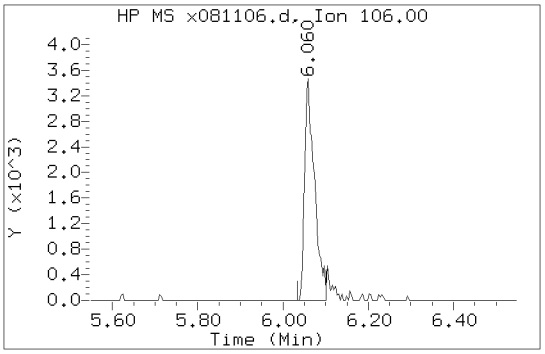
AFTER
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12-Aug-2023
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BEFORE
MASS
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AREA
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HEIGHT
3466
12-Aug-2023
22:49



AFTER
MASS
106
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12-Aug-2023
22:49

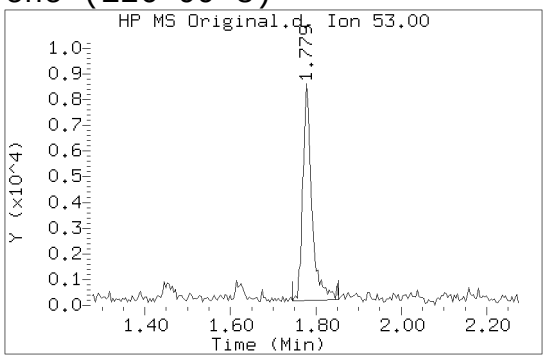


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Inj Date : 11-AUG-2023 13:15
InstruID : voa6.i
LabSampID : VSTD005

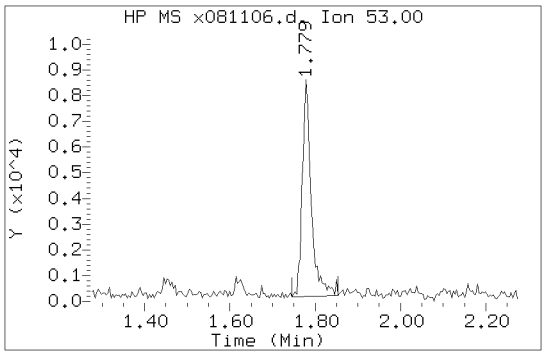
Chloroprene (126-99-8)

Reason Code:

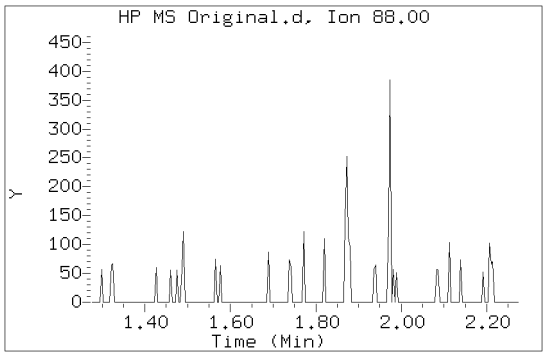
BEFORE
MASS
53
AREA
12759
HEIGHT
8433
12-Aug-2023
22:49



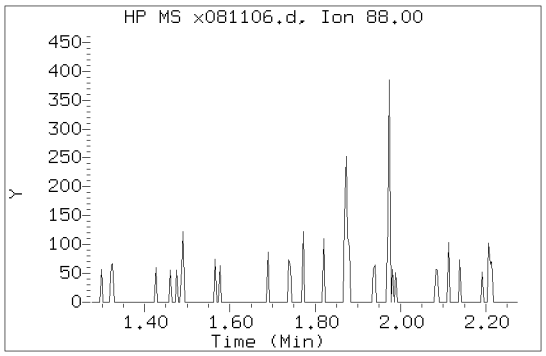
AFTER
MASS
53
AREA
12759
HEIGHT
8433
12-Aug-2023
22:49



BEFORE
MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:49



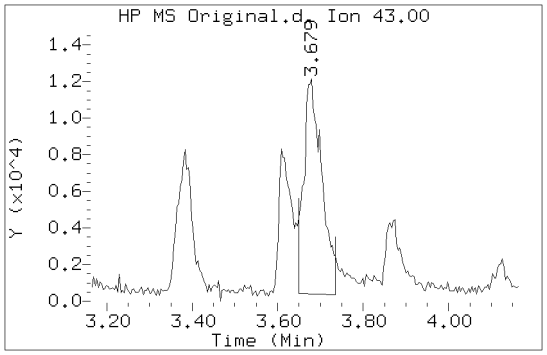
AFTER
MASS
88
AREA
0
HEIGHT
0
12-Aug-2023
22:49



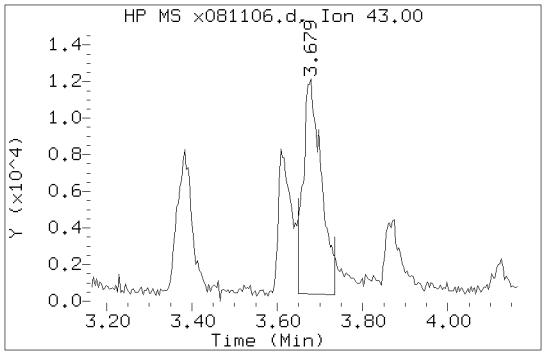
Ethyl Acetate (141-78-6)

Reason Code:

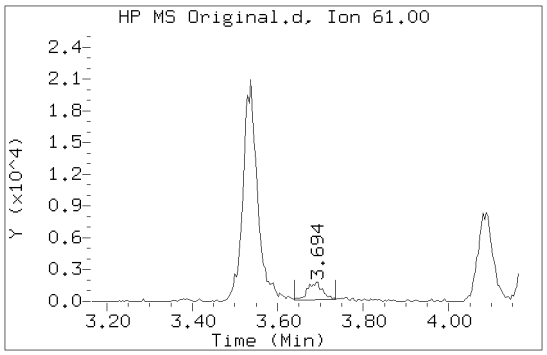
BEFORE
MASS
43
AREA
35083
HEIGHT
11733
12-Aug-2023
22:49



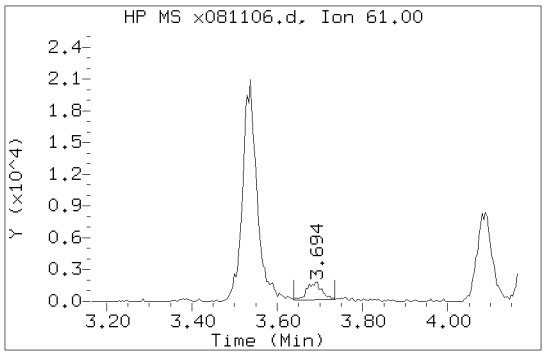
AFTER
MASS
43
AREA
35083
HEIGHT
11733
12-Aug-2023
22:49



BEFORE
MASS
61
AREA
4008
HEIGHT
1690
12-Aug-2023
22:49



AFTER
MASS
61
AREA
4008
HEIGHT
1690
12-Aug-2023
22:49

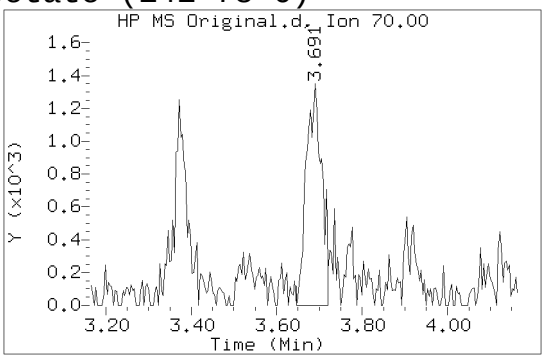


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InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

BEFORE

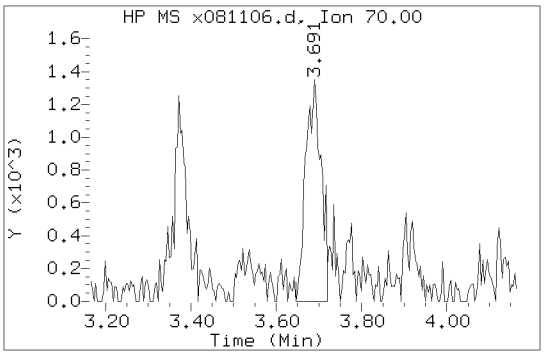
MASS
70
AREA
3398
HEIGHT
1351
12-Aug-2023
22:49



Reason Code:

AFTER

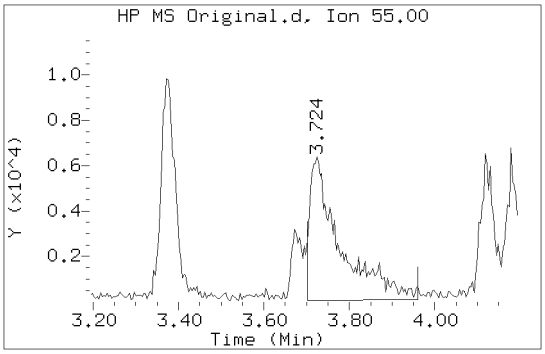
MASS
70
AREA
3398
HEIGHT
1351
12-Aug-2023
22:49



Methyl Acrylate (96-33-3)

BEFORE

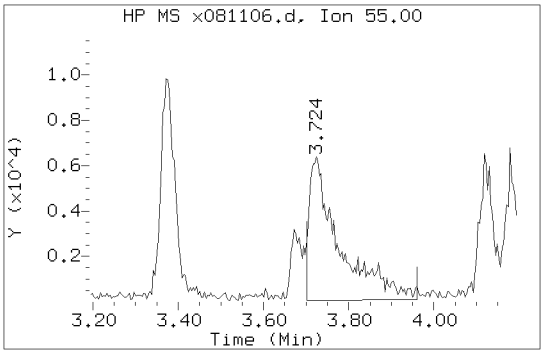
MASS
55
AREA
30863
HEIGHT
6309
12-Aug-2023
22:49



Reason Code:

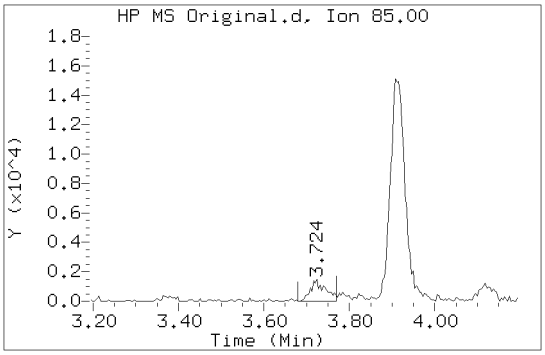
AFTER

MASS
55
AREA
30863
HEIGHT
6309
12-Aug-2023
22:49



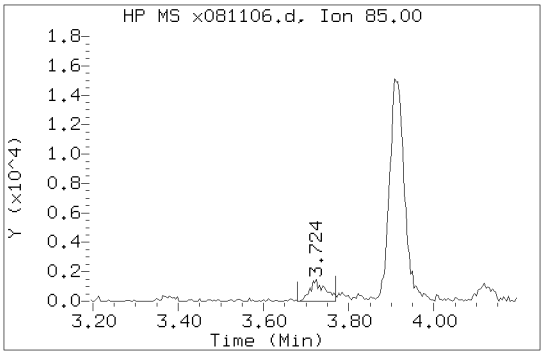
BEFORE

MASS
85
AREA
3554
HEIGHT
1491
12-Aug-2023
22:49



AFTER

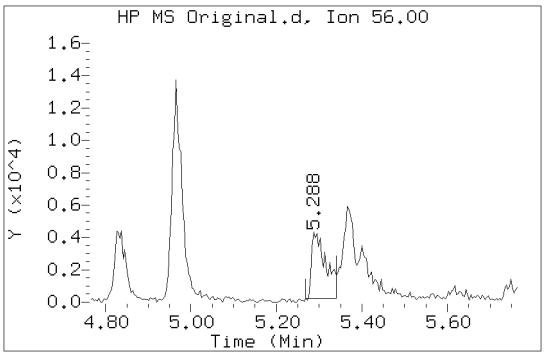
MASS
85
AREA
3554
HEIGHT
1491
12-Aug-2023
22:49



n-Butanol (71-36-3)

BEFORE

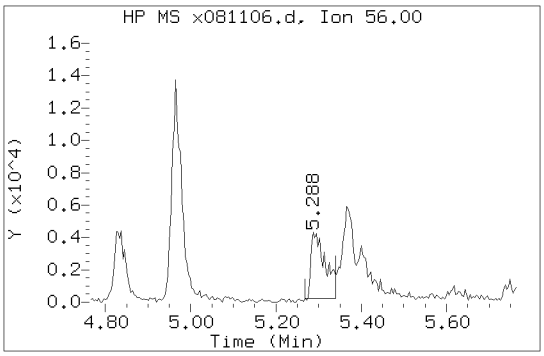
MASS
56
AREA
9555
HEIGHT
4115
12-Aug-2023
22:49



Reason Code:

AFTER

MASS
56
AREA
9555
HEIGHT
4115
12-Aug-2023
22:49



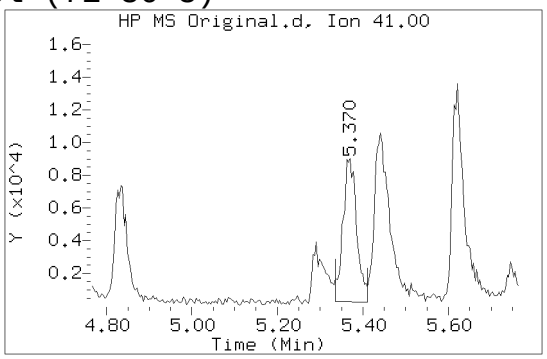
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Inj Date : 11-AUG-2023 13:15
InstruID : voa6.i
LabSampID : VSTD005

n-Butanol (71-36-3)

Reason Code:

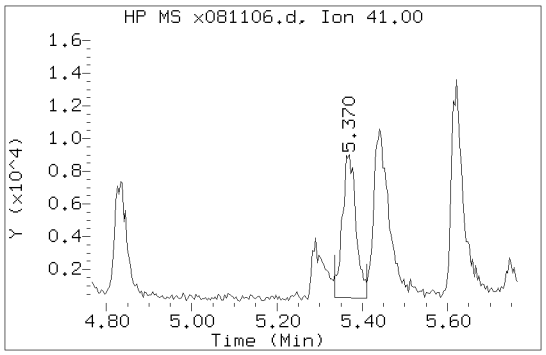
BEFORE

MASS
41
AREA
19670
HEIGHT
8754
12-Aug-2023
22:49



AFTER

MASS
41
AREA
19670
HEIGHT
8754
12-Aug-2023
22:49

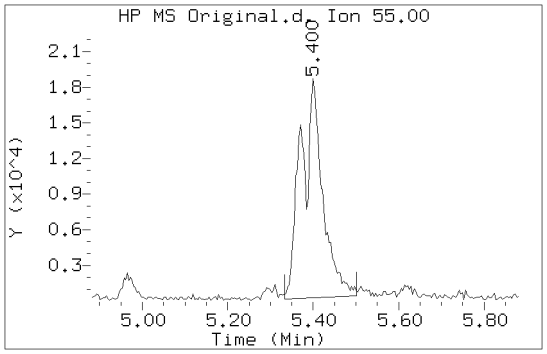


Ethyl Acrylate (140-88-5)

Reason Code:

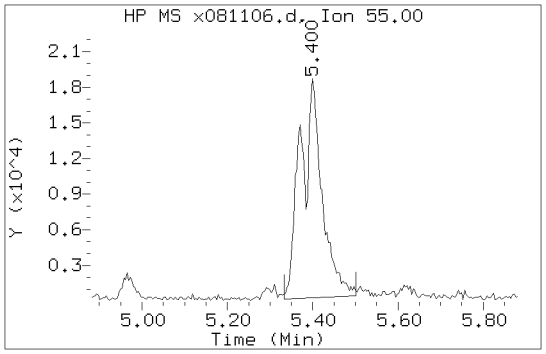
BEFORE

MASS
55
AREA
65654
HEIGHT
18419
12-Aug-2023
22:49



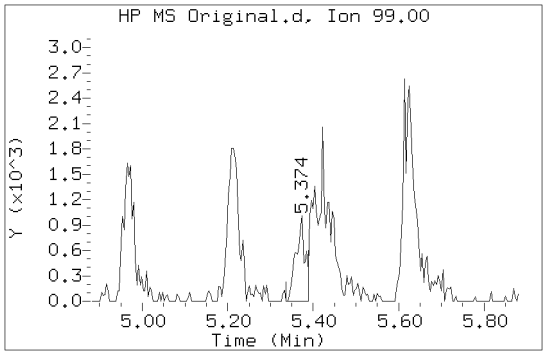
AFTER

MASS
55
AREA
65654
HEIGHT
18419
12-Aug-2023
22:49



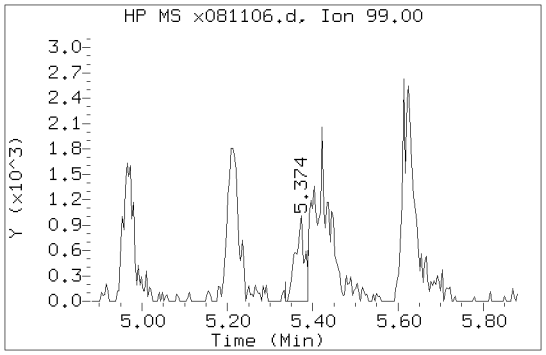
BEFORE

MASS
99
AREA
1505
HEIGHT
1011
12-Aug-2023
22:49



AFTER

MASS
99
AREA
1505
HEIGHT
1011
12-Aug-2023
22:49

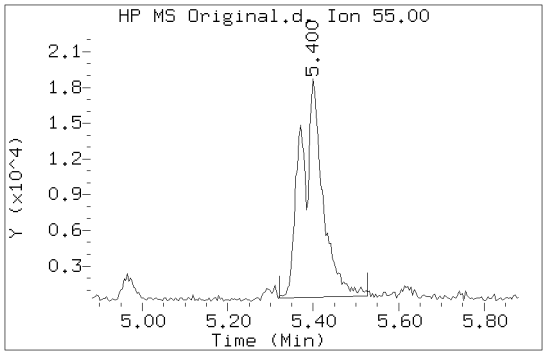


Methylcyclohexane (108-87-2)

Reason Code:

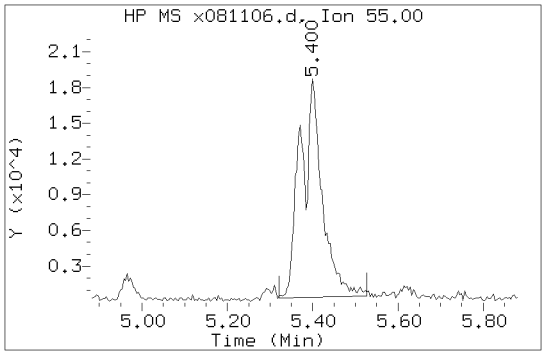
BEFORE

MASS
55
AREA
65554
HEIGHT
18313
12-Aug-2023
22:49



AFTER

MASS
55
AREA
65554
HEIGHT
18313
12-Aug-2023
22:49



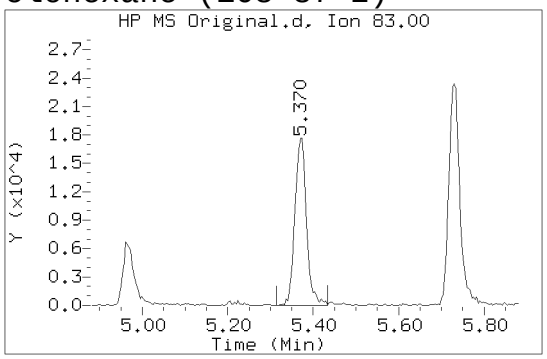
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Inj Date : 11-AUG-2023 13:15
InstruID : voa6.i
LabSampID : VSTD005

Methylcyclohexane (108-87-2)

Reason Code:

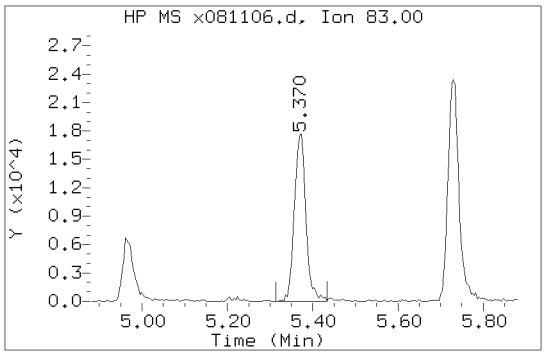
BEFORE

MASS
83
AREA
33817
HEIGHT
17680
12-Aug-2023
22:49



AFTER

MASS
83
AREA
33817
HEIGHT
17680
12-Aug-2023
22:49

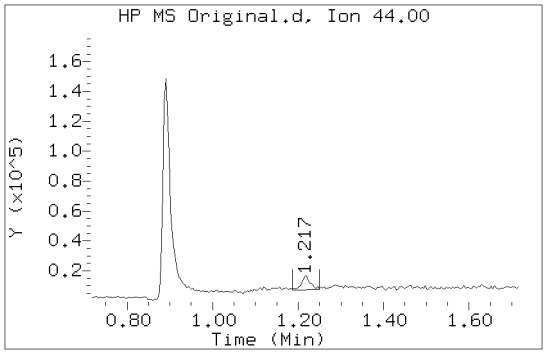


Acetaldehyde (75-07-0)

Reason Code:

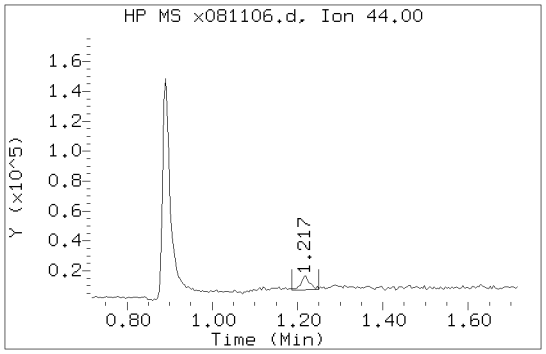
BEFORE

MASS
44
AREA
13449
HEIGHT
9163
12-Aug-2023
22:49



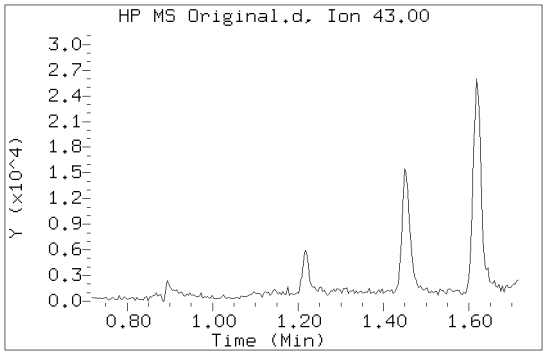
AFTER

MASS
44
AREA
13449
HEIGHT
9163
12-Aug-2023
22:49



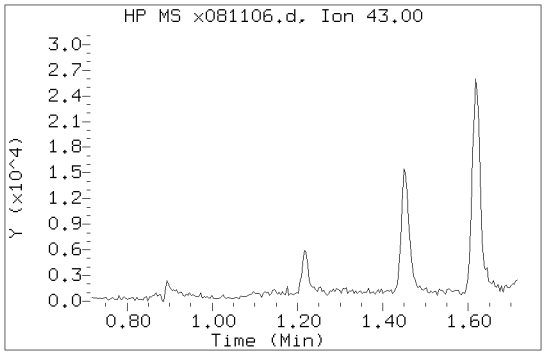
BEFORE

MASS
43
AREA
0
HEIGHT
0
12-Aug-2023
22:49



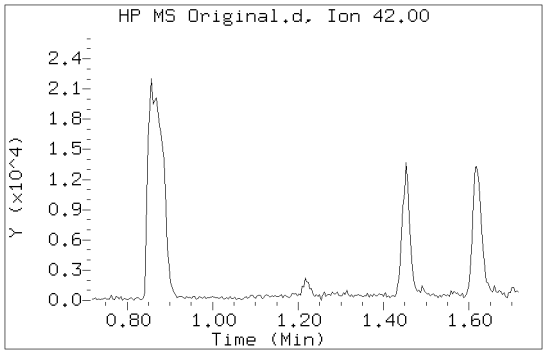
AFTER

MASS
43
AREA
0
HEIGHT
0
12-Aug-2023
22:49



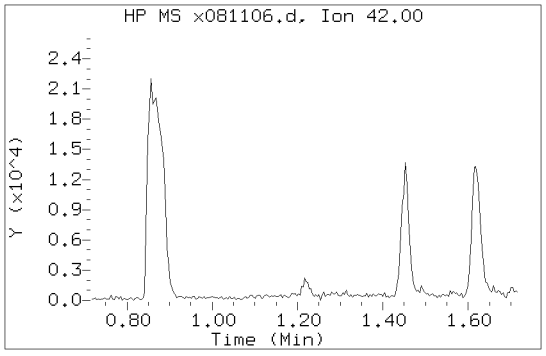
BEFORE

MASS
42
AREA
0
HEIGHT
0
12-Aug-2023
22:49



AFTER

MASS
42
AREA
0
HEIGHT
0
12-Aug-2023
22:49

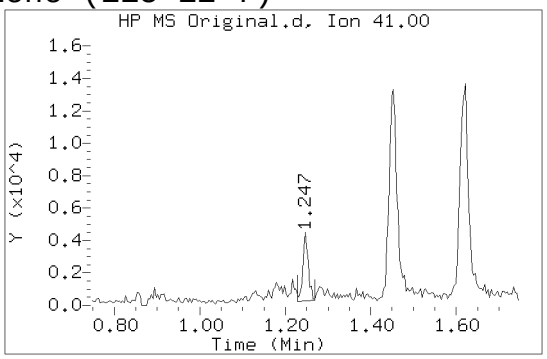


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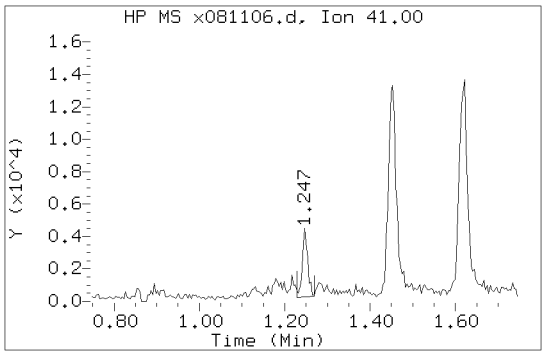
Isobutylene (115-11-7)

Reason Code:

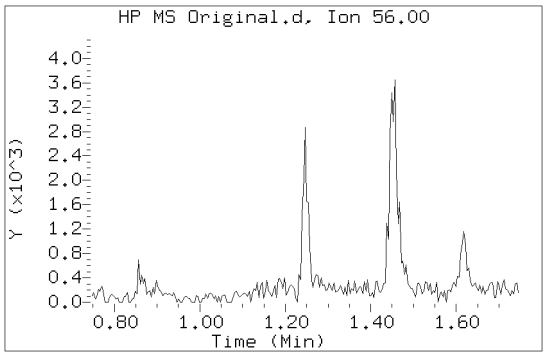
BEFORE
MASS
41
AREA
3970
HEIGHT
4247
12-Aug-2023
22:49



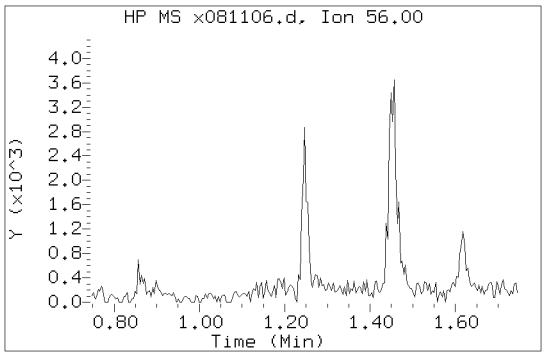
AFTER
MASS
41
AREA
3970
HEIGHT
4247
12-Aug-2023
22:49



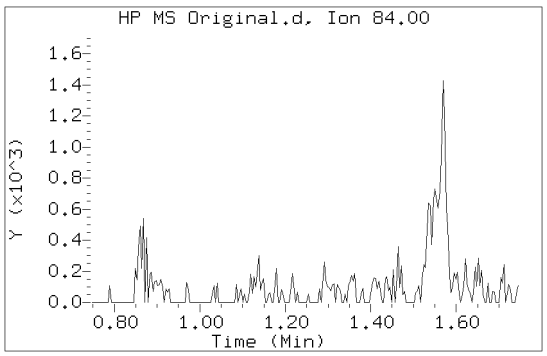
BEFORE
MASS
56
AREA
0
HEIGHT
0
12-Aug-2023
22:49



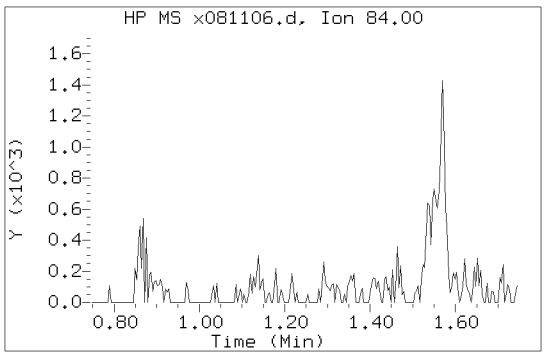
AFTER
MASS
56
AREA
0
HEIGHT
0
12-Aug-2023
22:49



BEFORE
MASS
84
AREA
0
HEIGHT
0
12-Aug-2023
22:49



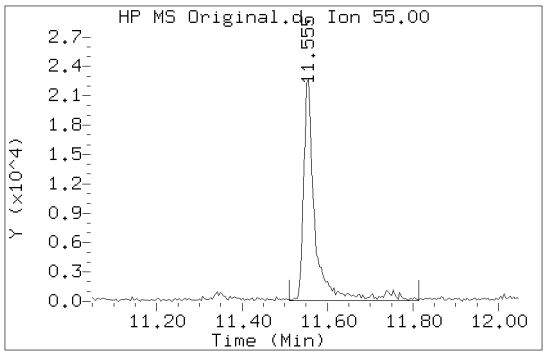
AFTER
MASS
84
AREA
0
HEIGHT
0
12-Aug-2023
22:49



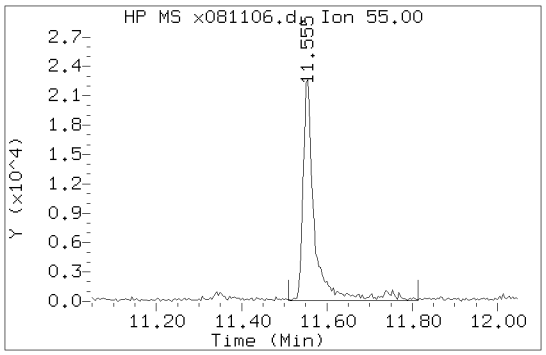
2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
55
AREA
43209
HEIGHT
22554
12-Aug-2023
22:49



AFTER
MASS
55
AREA
43209
HEIGHT
22554
12-Aug-2023
22:49



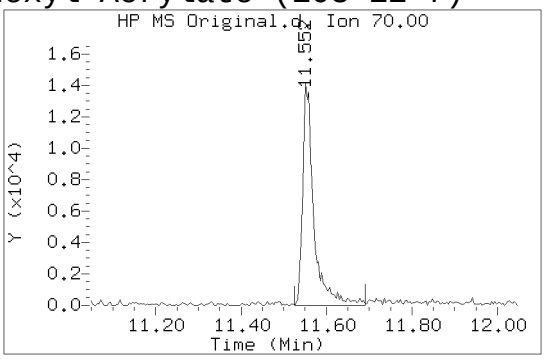
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Inj Date : 11-AUG-2023 13:15
InstruID : voa6.i
LabSampID : VSTD005

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

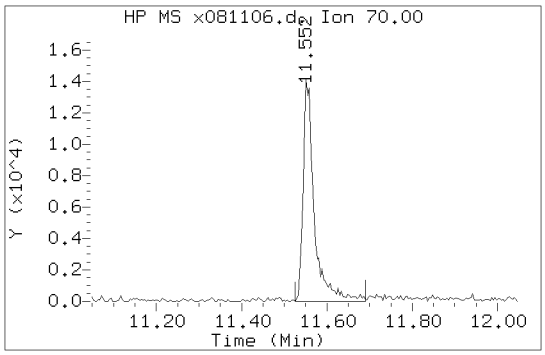
BEFORE

MASS
70
AREA
26209
HEIGHT
14111
12-Aug-2023
22:49



AFTER

MASS
70
AREA
26209
HEIGHT
14111
12-Aug-2023
22:49



ALS Laboratory Group

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Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 11-AUG-2023 13:36
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V6;WATER;0;1;
Comment :
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Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 13:15 Cal File: X081106.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	594179	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	27941	400.000	369.95
140 1,3-Butadiene	54	1.171	1.171	(0.280)	109945	20.0000	17.96
25 Methacrylonitrile	41	3.836	3.836	(0.918)	114783	20.0000	19.36
12 Isobutyl Alcohol	43	4.684	4.684	(1.120)	366430	400.000	393.42
13 Acetonitrile	39	2.202	2.202	(0.527)	176623	200.000	192.74
14 Allyl Chloride	41	2.206	2.206	(0.528)	336437	20.0000	18.58
4 Propionitrile	54	3.660	3.660	(0.875)	160298	200.000	193.72
136 n-Hexane	57	2.776	2.776	(0.664)	118882	20.0000	22.69
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	41908	20.0000	18.52(H)
194 Acetaldehyde	44	1.216	1.216	(0.291)	59320	80.0000	94.63(M)
23 Chloroprene	53	1.778	1.778	(0.425)	45834	20.0000	18.23(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	212279	20.0000	19.78
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	233902	20.0000	19.80
139 Diethyl ether	59	1.763	1.763	(0.422)	100918	20.0000	19.24
130 Ethyl Acetate	43	3.664	3.664	(0.876)	141943	20.0000	20.81
40 Methyl Methacrylate	41	5.610	5.610	(1.342)	104538	20.0000	19.12
49 Ethyl Methacrylate	69	6.787	6.787	(1.367)	167313	20.0000	19.13(H)
132 n-Butanol	56	5.268	5.268	(1.260)	50123	400.000	365.12(M)
142 Tetrahydrofuran	42	3.855	3.855	(0.922)	42663	40.0000	36.80

150	Allyl alcohol	57	2.776	2.776 (0.664)	118882	400.000	454.42
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	427412	20.0000	18.25

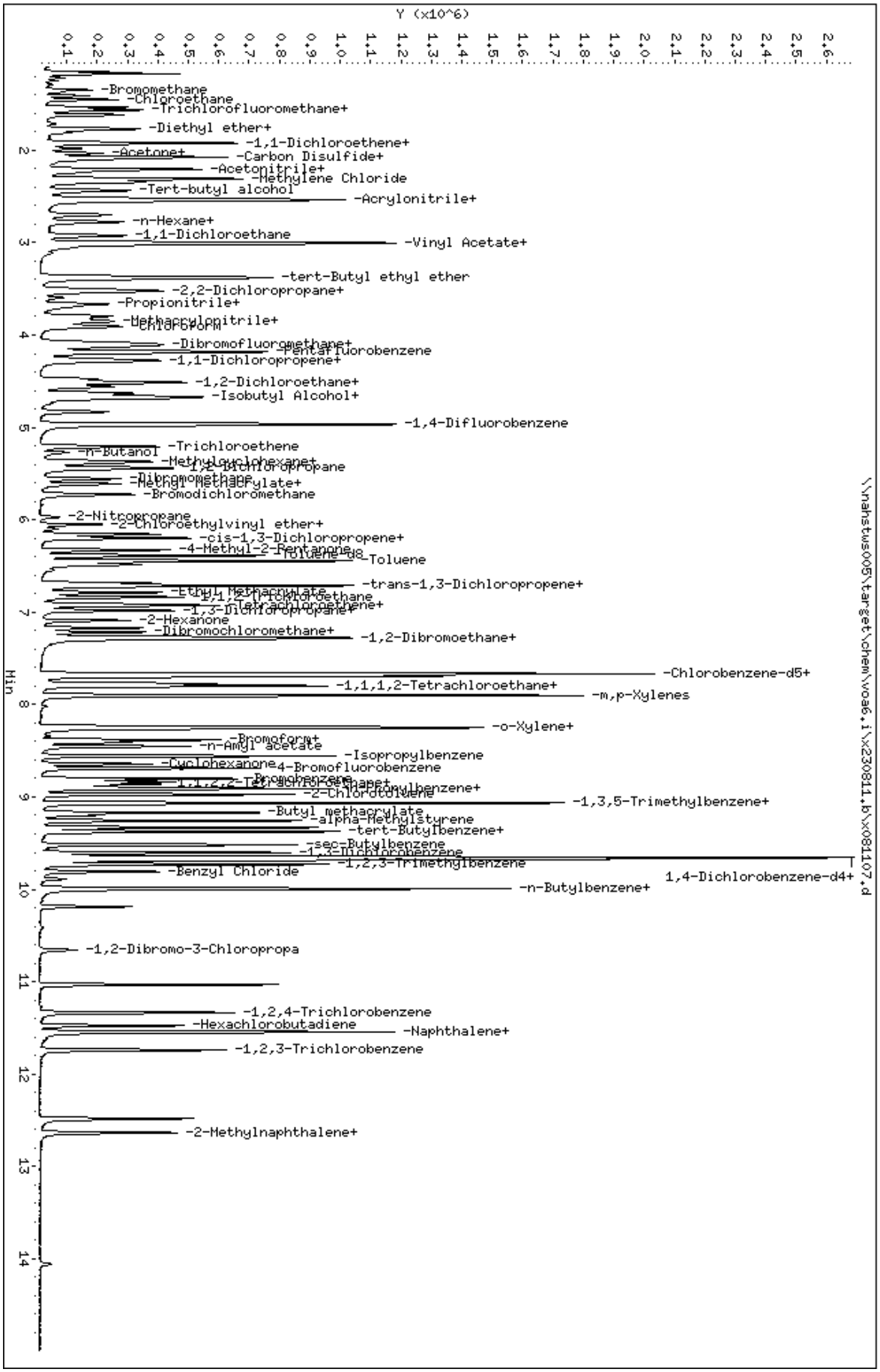
			QUANT SIG					AMOUNTS	
								CAL-AMT	ON-COL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131	Methyl Acrylate	55	3.702	3.702	(0.885)	105819	20.0000	18.02(M)
	162	Butyl acrylate	55	8.252	8.252	(1.076)	269198	20.0000	18.42
	2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	99620	20.0000	18.71
	3	Chloromethane	50	1.085	1.085	(0.260)	99333	20.0000	17.17
	5	Vinyl Chloride	62	1.149	1.149	(0.275)	131824	20.0000	18.49
	6	Bromomethane	94	1.347	1.347	(0.322)	66144	20.0000	17.24
	7	Chloroethane	64	1.407	1.407	(0.337)	87886	20.0000	18.81
	8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	185034	20.0000	18.24
	9	Acrolein	56	1.865	1.865	(0.446)	7342	40.0000	35.98(H)
	10	Acetone	43	1.981	1.981	(0.474)	100132	40.0000	40.98
	11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	106371	20.0000	18.54
	15	Iodomethane	142	2.030	2.030	(0.485)	171922	40.0000	30.15
	16	Acrylonitrile	53	2.543	2.543	(0.608)	107147	40.0000	38.76
	17	Methylene Chloride	84	2.307	2.307	(0.552)	143307	20.0000	19.91
	18	Methyl tert-butyl ether	73	2.539	2.539	(0.607)	388395	20.0000	18.97
	19	Carbon Disulfide	76	2.075	2.075	(0.496)	644484	40.0000	37.85
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	128440	20.0000	19.26
	21	Vinyl Acetate	43	3.004	3.004	(0.719)	779470	40.0000	39.52
	22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	239723	20.0000	19.09
	24	2-Butanone	43	3.593	3.593	(0.859)	78570	40.0000	35.72(H)
	26	2,2-Dichloropropane	77	3.510	3.510	(0.840)	162441	20.0000	19.26
	27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	126395	20.0000	19.74
	28	Chloroform	83	3.911	3.911	(0.935)	214801	20.0000	19.51
	29	Bromochloromethane	128	3.799	3.799	(0.909)	69658	20.0000	19.13
$	30	Dibromofluoromethane	113	4.106	4.106	(0.982)	119843	20.0000	21.52
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	170734	20.0000	19.32
	32	1,1-Dichloropropene	75	4.286	4.286	(0.863)	142215	20.0000	18.93(H)
	33	1,2-Dichloroethane	62	4.556	4.556	(0.918)	174386	20.0000	19.21
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	140370	20.0000	17.70(H)
$	35	1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	130066	20.0000	20.79
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	954542	50.0000	
	37	Benzene	78	4.515	4.515	(0.909)	448606	20.0000	19.08
	38	Trichloroethene	130	5.208	5.208	(1.049)	126937	20.0000	18.78
	39	Bromodichloromethane	83	5.726	5.726	(1.153)	165416	20.0000	18.89
	41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	81477	40.0000	36.37
	42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	124523	20.0000	18.78
	44	Dibromomethane	93	5.553	5.553	(1.119)	84627	20.0000	18.67
	45	4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	249622	40.0000	38.79
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	189727	20.0000	18.93
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	897079	50.0000	
$	48	Toluene-d8	98	6.386	6.386	(0.833)	408559	20.0000	19.35
	50	Toluene	91	6.446	6.446	(0.841)	473181	20.0000	18.92
	51	trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	155214	20.0000	18.45
	52	2-Hexanone	43	7.090	7.090	(0.925)	171498	40.0000	39.70
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	97724	20.0000	19.61
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	193640	20.0000	19.01
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	139248	20.0000	19.36
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	97904	20.0000	18.84
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	120578	20.0000	19.80
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	93256	20.0000	16.88(M)
	59	Chlorobenzene	112	7.694	7.694	(1.003)	326753	20.0000	18.97
	60	1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	129317	20.0000	19.43

61 Ethylbenzene	106	7.795	7.795 (1.017)	165338	20.0000	19.43
62 m,p-Xylenes	106	7.900	7.900 (1.030)	420476	40.0000	38.64

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.241	8.241	(1.075)	205919	20.0000	19.20
	64 Styrene	104	8.256	8.256	(1.077)	354808	20.0000	19.89
	66 Bromoform	173	8.410	8.410	(1.097)	95387	20.0000	19.65
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	505663	20.0000	18.97
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	159320	20.0000	19.39
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	175173	20.0000	19.95
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	504555	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	118920	20.0000	19.68(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	592736	20.0000	19.86
	74 Bromobenzene	156	8.803	8.803	(0.912)	159999	20.0000	19.84
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	423856	20.0000	19.43
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	376667	20.0000	19.71
	77 4-Chlorotoluene	91	9.070	9.070	(0.939)	432420	20.0000	19.67
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	364564	20.0000	19.51
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	432105	20.0000	19.24
	81 sec-Butylbenzene	105	9.519	9.519	(0.986)	485819	20.0000	18.96
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	449583	20.0000	19.41
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	278790	20.0000	19.41
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	295894	20.0000	19.23
	86 Benzyl Chloride	91	9.808	9.808	(1.279)	233132	20.0000	18.15
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	387389	20.0000	18.50
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	283339	20.0000	19.54
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.104)	25685	20.0000	18.49
	90 1,2,4-Trichlorobenzene	180	11.338	11.338	(1.174)	185838	20.0000	19.37
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	73649	20.0000	22.23
	92 Naphthalene	128	11.544	11.544	(1.195)	460009	20.0000	19.20
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	171743	20.0000	18.36
M	94 1,2-Dichloroethylene (total)	96				254835	40.0000	
M	95 Xylenes (total)	106				626395	60.0000	
	141 Cyclohexane	56	4.118	4.118	(0.985)	130025	20.0000	17.59(M)
	138 Freon TF	101	1.921	1.921	(0.459)	98415	20.0000	18.33
	147 Methylcyclohexane	55	5.388	5.388	(1.085)	259972	20.0000	18.12
	146 Methyl Acetate	43	2.236	2.236	(0.535)	107794	20.0000	20.18
	148 Tert-Butyl alcohol	59	2.435	2.435	(0.582)	300900	400.000	412.57
	149 Isopropyl Alcohol	45	2.101	2.101	(0.502)	173548	400.000	408.56

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
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Column phase: DB624

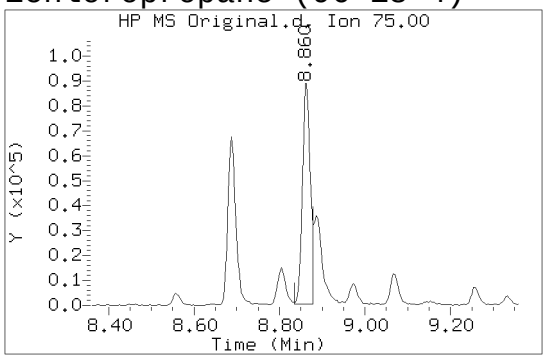
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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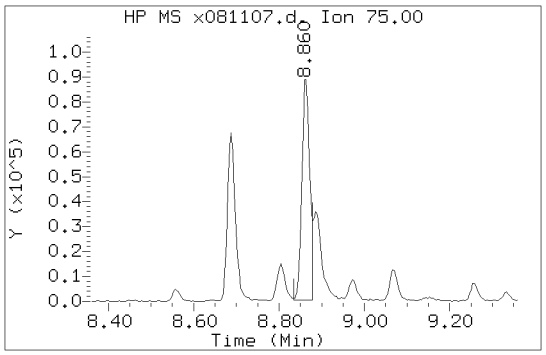
1,2,3-Trichloropropane (96-18-4)

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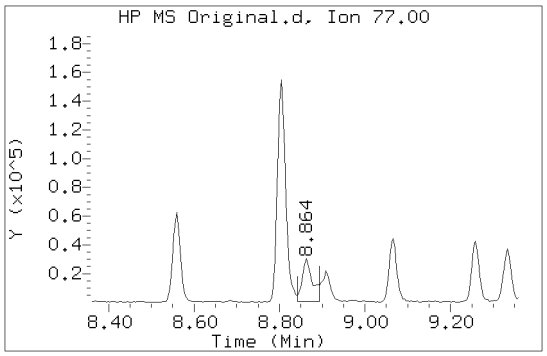
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22:49



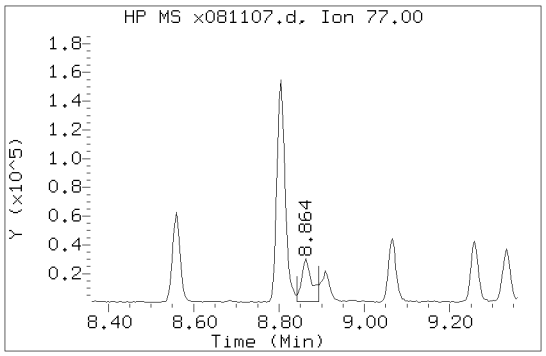
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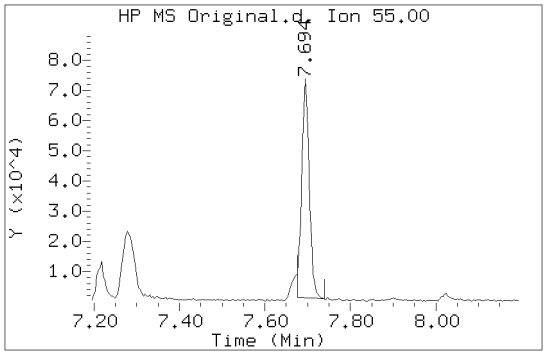
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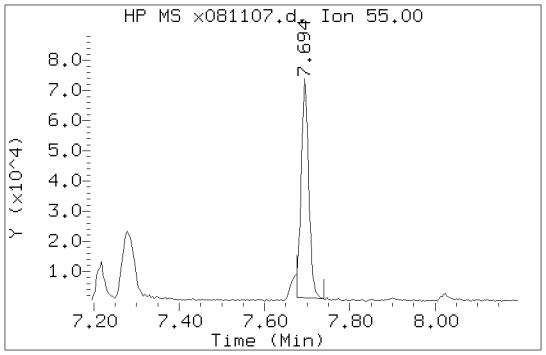
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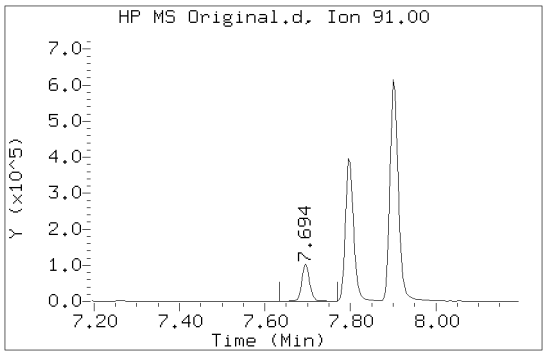
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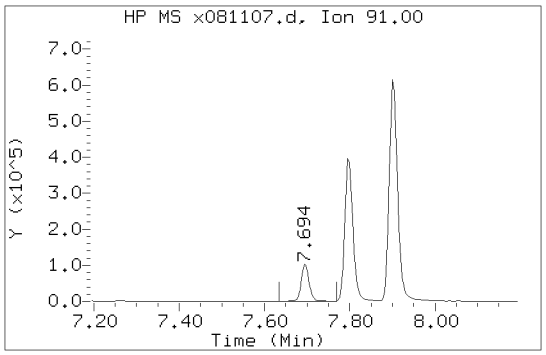
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BEFORE
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AFTER
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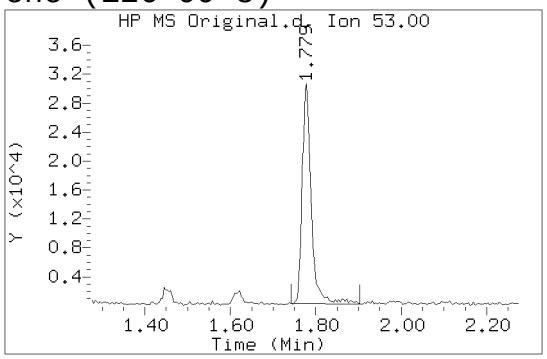


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LabSampID : VSTD020

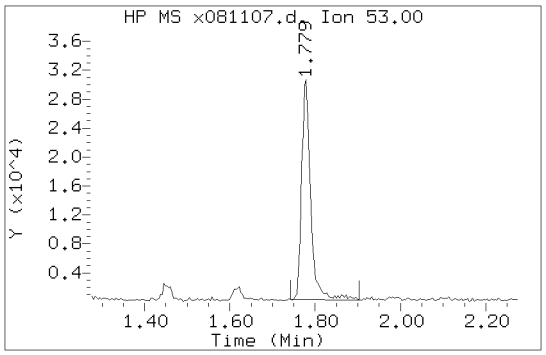
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Reason Code:

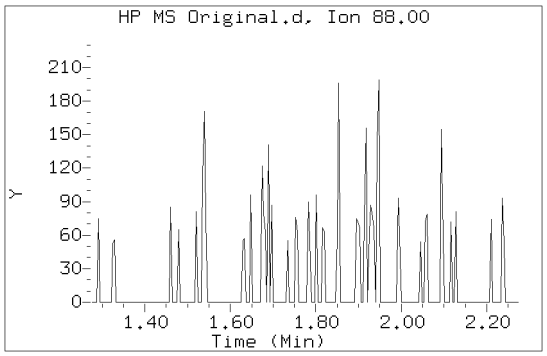
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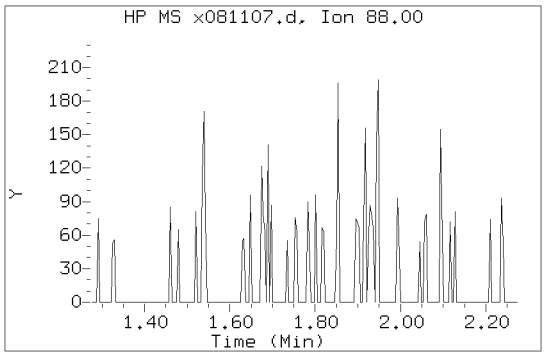
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BEFORE
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12-Aug-2023
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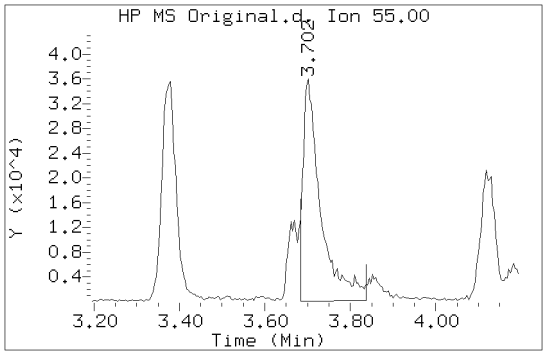
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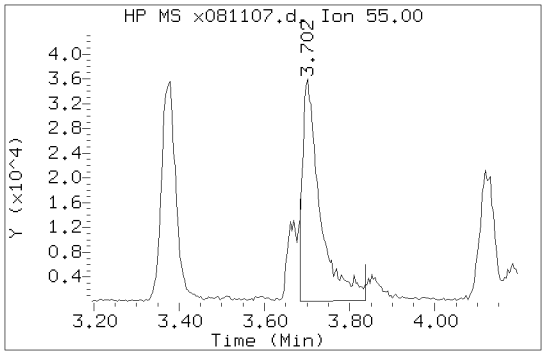
Methyl Acrylate (96-33-3)

Reason Code:

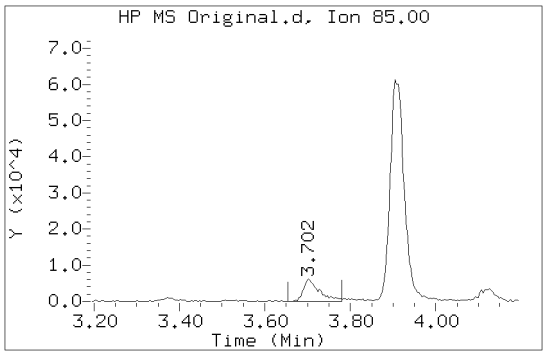
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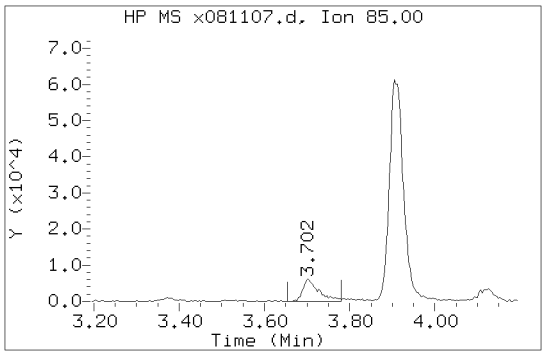
AFTER
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BEFORE
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12-Aug-2023
22:49



AFTER
MASS
85
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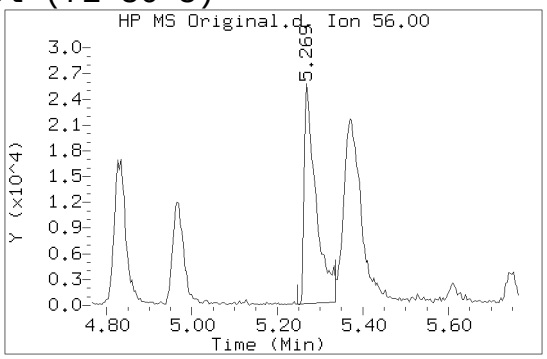


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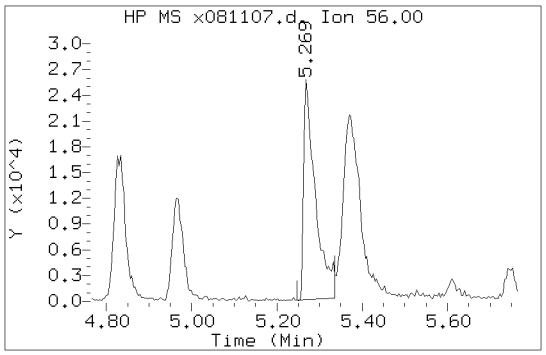
n-Butanol (71-36-3)

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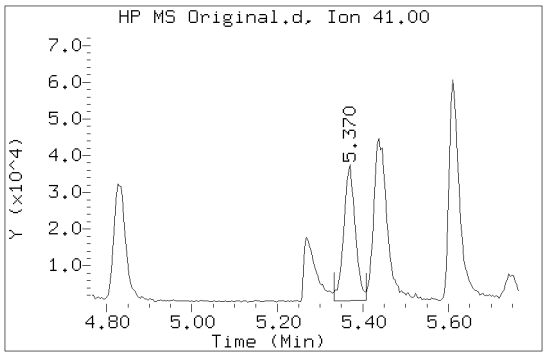
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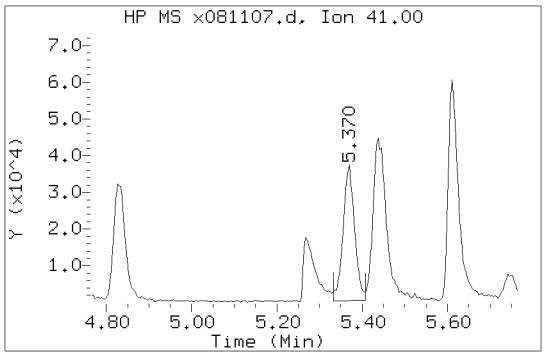
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12-Aug-2023
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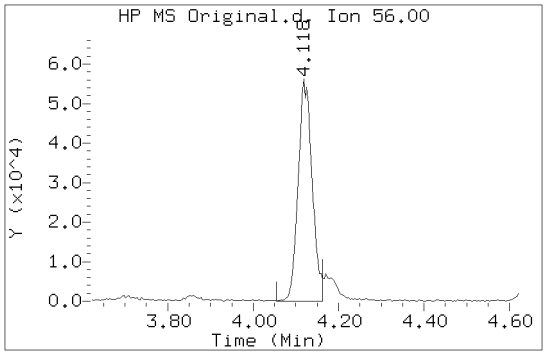
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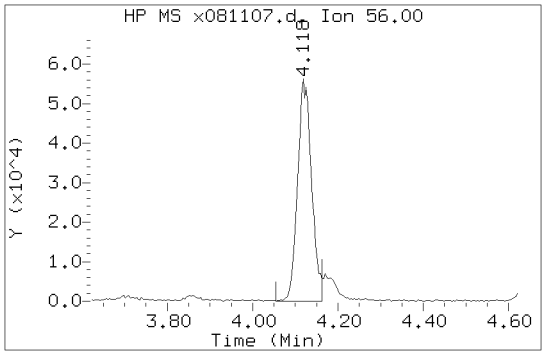
Cyclohexane (110-82-7)

Reason Code:

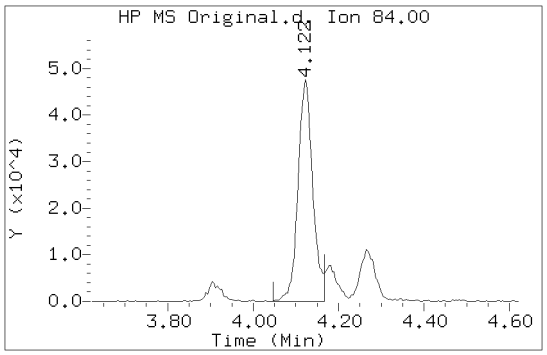
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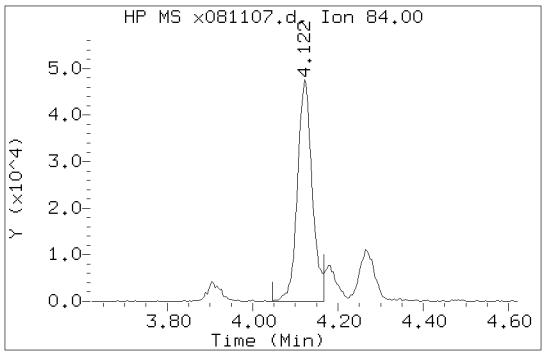
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22:49



BEFORE
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AFTER
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12-Aug-2023
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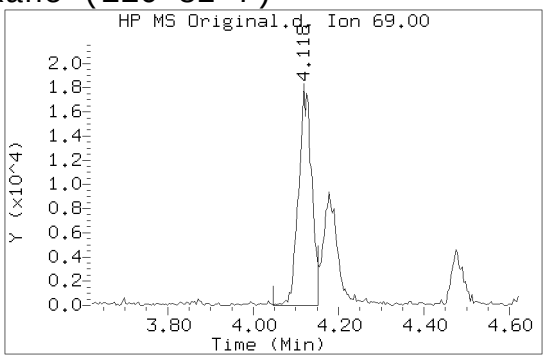
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LabSampID : VSTD020

Cyclohexane (110-82-7)

Reason Code:

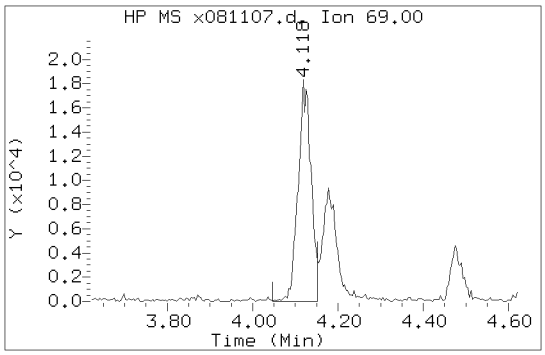
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AFTER

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12-Aug-2023
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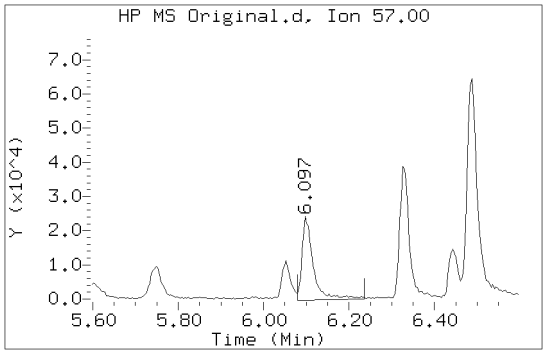


Epichlorohydrin (106-89-8)

Reason Code:

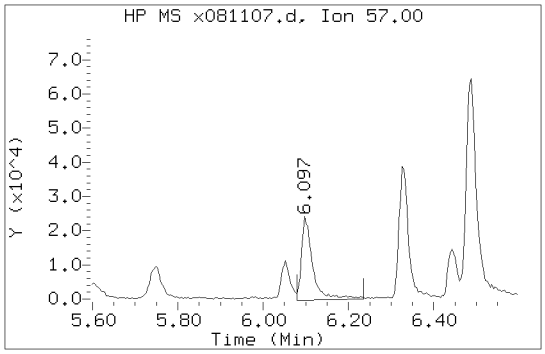
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AREA
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12-Aug-2023
22:49



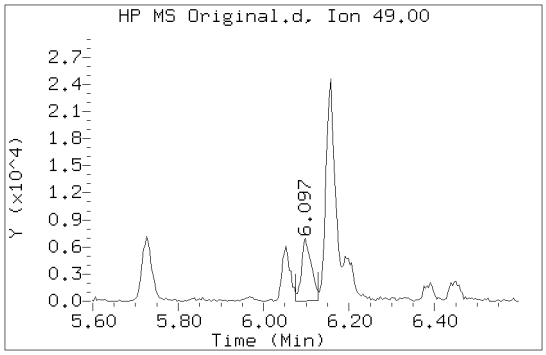
AFTER

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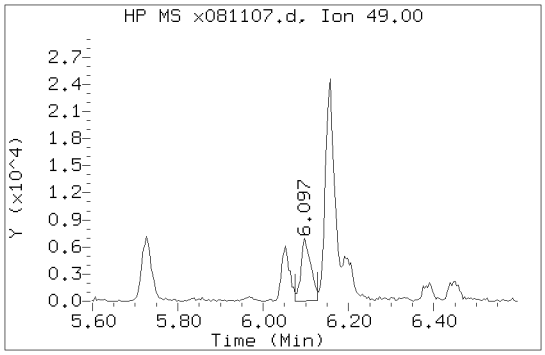
BEFORE

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AFTER

MASS
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12-Aug-2023
22:49

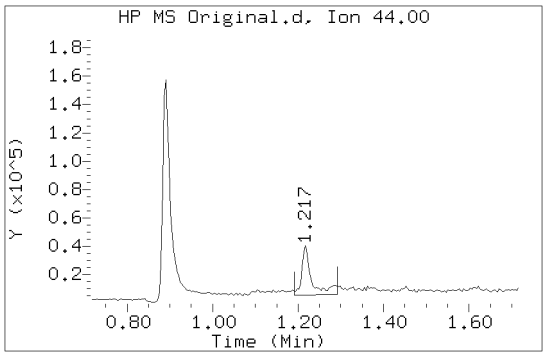


Acetaldehyde (75-07-0)

Reason Code:

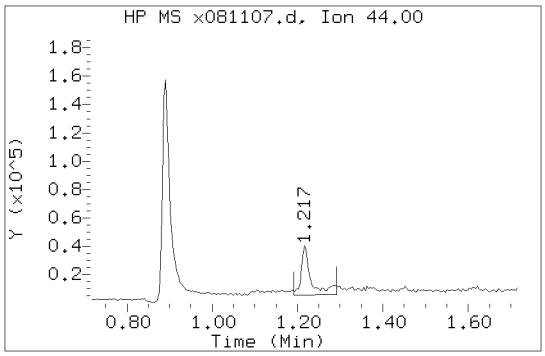
BEFORE

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22:49



AFTER

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HEIGHT
34980
12-Aug-2023
22:49

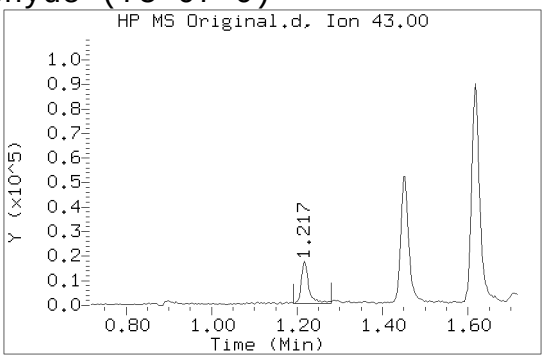


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Inj Date : 11-AUG-2023 13:36
InstruID : voa6.i
LabSampID : VSTD020

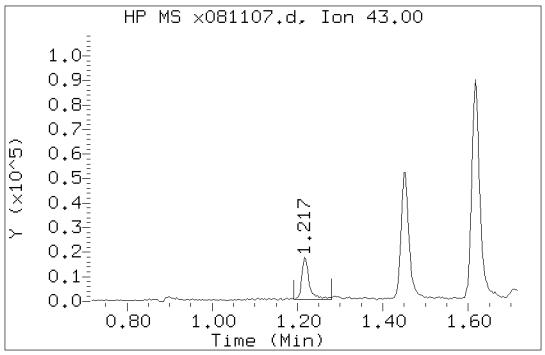
Acetaldehyde (75-07-0)

Reason Code:

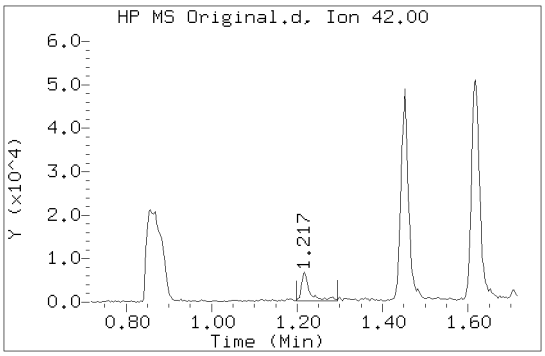
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12-Aug-2023
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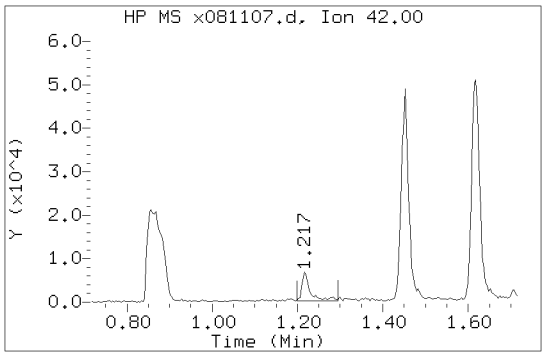
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BEFORE
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42
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12-Aug-2023
22:49



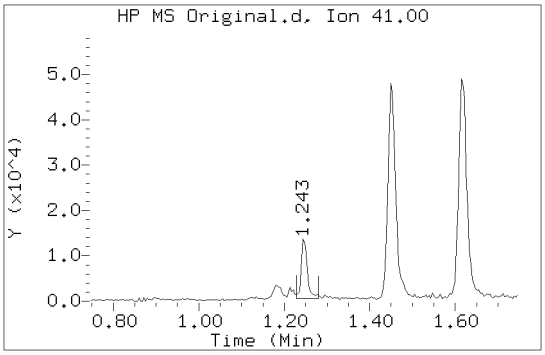
AFTER
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12-Aug-2023
22:49



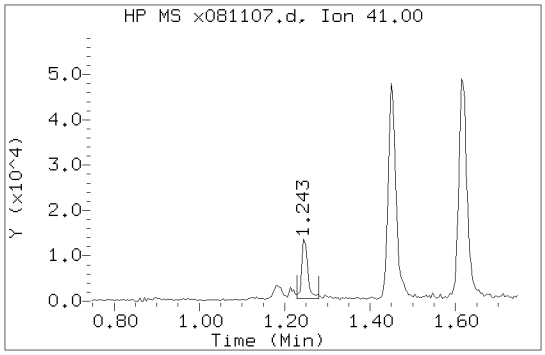
Isobutylene (115-11-7)

Reason Code:

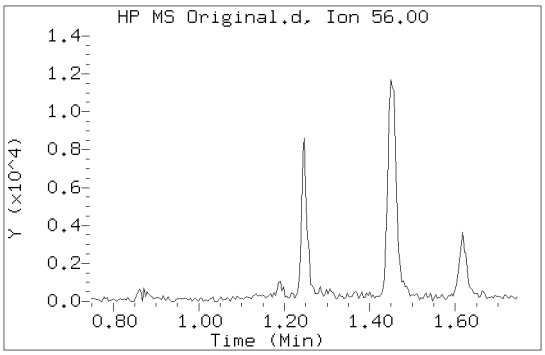
BEFORE
MASS
41
AREA
14022
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13224
12-Aug-2023
22:49



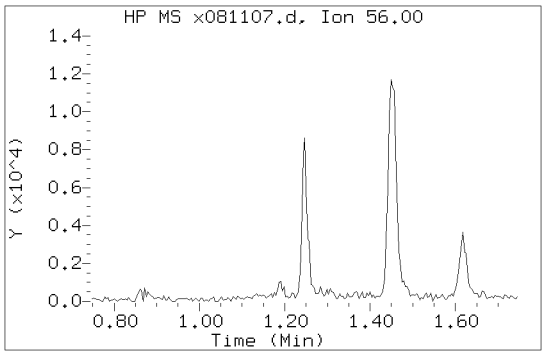
AFTER
MASS
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14022
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13224
12-Aug-2023
22:49



BEFORE
MASS
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AREA
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22:49



AFTER
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HEIGHT
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12-Aug-2023
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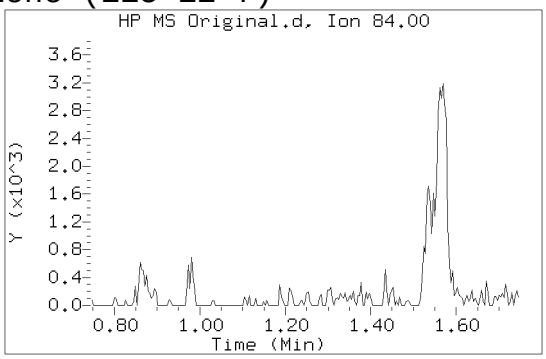
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InstruID : voa6.i
LabSampID : VSTD020

Isobutylene (115-11-7)

Reason Code:

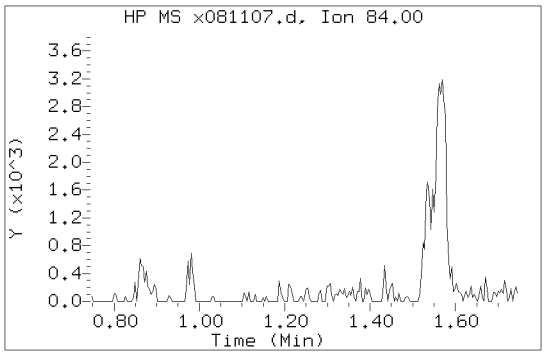
BEFORE

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HEIGHT
0
12-Aug-2023
22:49



AFTER

MASS
84
AREA
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HEIGHT
0
12-Aug-2023
22:49



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081108.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 11-AUG-2023 13:56
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 13:36 Cal File: X081107.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	625938	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	74087	1000.00	931.19
140 1,3-Butadiene	54	1.171	1.171	(0.280)	288154	50.0000	44.68
25 Methacrylonitrile	41	3.829	3.829	(0.916)	304721	50.0000	48.81
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	957978	1000.00	976.37
13 Acetonitrile	39	2.202	2.202	(0.527)	466698	500.000	483.46
14 Allyl Chloride	41	2.202	2.202	(0.527)	902455	50.0000	47.32
4 Propionitrile	54	3.660	3.660	(0.875)	442782	500.000	507.95
136 n-Hexane	57	2.772	2.772	(0.663)	282893	50.0000	48.41
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	110164	50.0000	45.77(H)
194 Acetaldehyde	44	1.216	1.216	(0.291)	128302	200.000	203.38(M)
23 Chloroprene	53	1.775	1.775	(0.424)	115869	50.0000	43.75(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	569808	50.0000	48.36
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	667407	50.0000	53.10
139 Diethyl ether	59	1.763	1.763	(0.422)	267847	50.0000	48.48
130 Ethyl Acetate	43	3.664	3.664	(0.876)	338578	50.0000	47.12
40 Methyl Methacrylate	41	5.606	5.606	(1.341)	286102	50.0000	49.67
49 Ethyl Methacrylate	69	6.787	6.787	(1.367)	441120	50.0000	47.75(H)
132 n-Butanol	56	5.265	5.265	(1.259)	143573	1000.00	876.06(M)
142 Tetrahydrofuran	42	3.851	3.851	(0.921)	117209	100.000	95.99

150	Allyl alcohol	57	2.772	2.772 (0.663)	282893	1000.00	967.48
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	1226059	50.0000	47.68

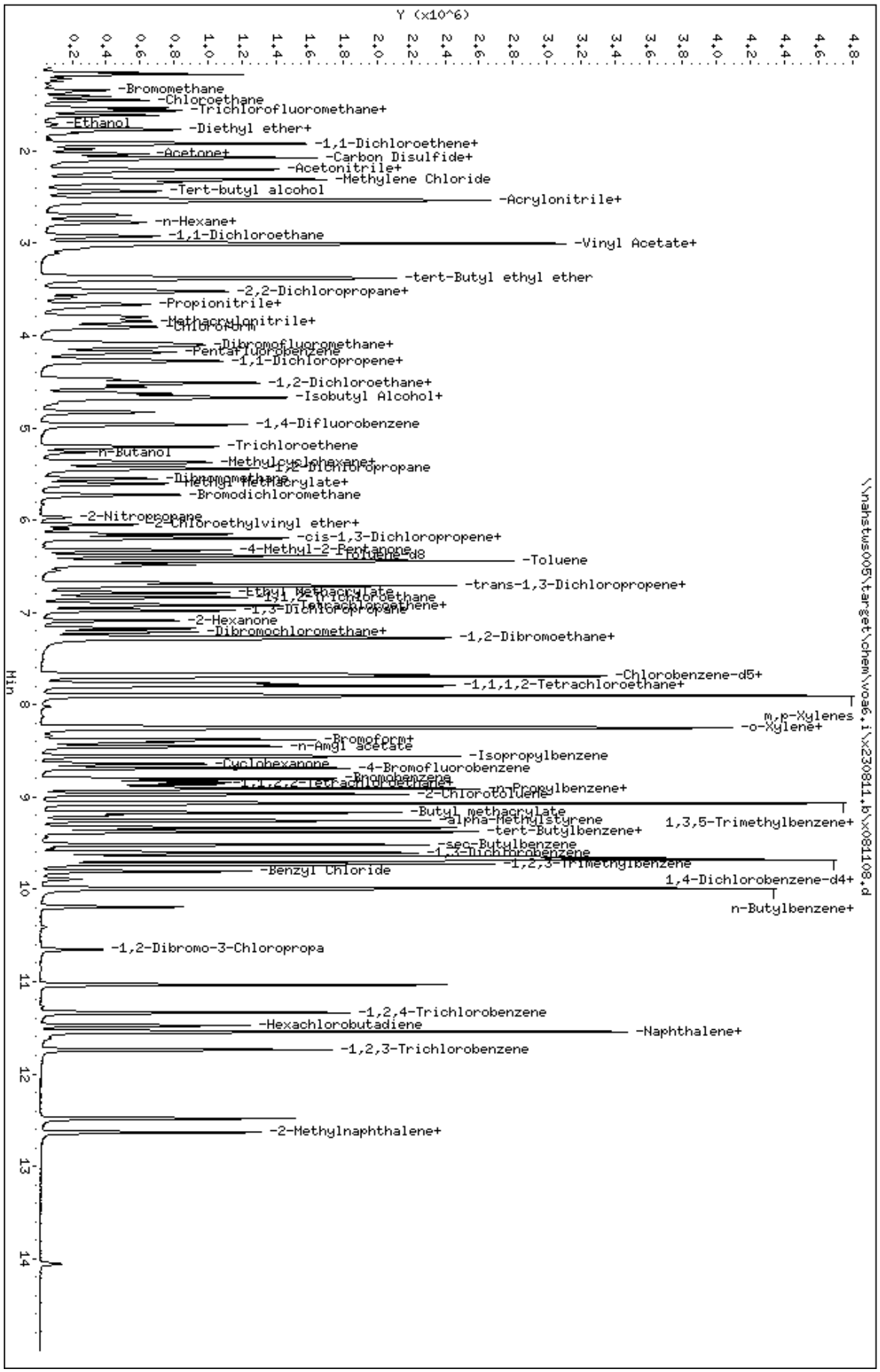
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.694	3.694	(0.883)	290322	50.0000	46.94(M)
	162	Butyl acrylate	55	8.249	8.249	(1.076)	753228	50.0000	48.44
	2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	255633	50.0000	44.62
	3	Chloromethane	50	1.085	1.085	(0.260)	252266	50.0000	41.41
	5	Vinyl Chloride	62	1.149	1.149	(0.275)	348444	50.0000	46.41
	6	Bromomethane	94	1.344	1.344	(0.321)	175230	50.0000	43.35
	7	Chloroethane	64	1.407	1.407	(0.337)	227926	50.0000	46.31
	8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	471489	50.0000	44.12
	9	Acrolein	56	1.868	1.868	(0.447)	22472	100.000	109.78(M)
	10	Acetone	43	1.977	1.977	(0.473)	247355	100.000	102.29
	11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	272717	50.0000	45.12
	15	Iodomethane	142	2.033	2.033	(0.486)	646092	100.000	91.55
	16	Acrylonitrile	53	2.539	2.539	(0.607)	277128	100.000	95.18
	17	Methylene Chloride	84	2.307	2.307	(0.552)	351292	50.0000	46.34
	18	Methyl tert-butyl ether	73	2.539	2.539	(0.607)	1034145	50.0000	47.96
	19	Carbon Disulfide	76	2.075	2.075	(0.496)	1686583	100.000	94.02
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	328345	50.0000	46.74
	21	Vinyl Acetate	43	3.000	3.000	(0.718)	2062146	100.000	99.25
	22	1,1-Dichloroethane	63	2.926	2.926	(0.700)	616011	50.0000	46.57
	24	2-Butanone	43	3.585	3.585	(0.857)	238982	100.000	103.14(H)
	26	2,2-Dichloropropane	77	3.510	3.510	(0.840)	420039	50.0000	47.30
	27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	328642	50.0000	48.72
	28	Chloroform	83	3.908	3.908	(0.935)	553085	50.0000	47.70
	29	Bromochloromethane	128	3.795	3.795	(0.908)	180912	50.0000	47.18
$	30	Dibromofluoromethane	113	4.099	4.099	(0.980)	277572	50.0000	48.32
	31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	441440	50.0000	47.42
	32	1,1-Dichloropropene	75	4.283	4.283	(0.863)	361675	50.0000	45.59(H)
	33	1,2-Dichloroethane	62	4.556	4.556	(0.918)	449454	50.0000	46.89
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	362480	50.0000	43.28(H)
$	35	1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	321172	50.0000	50.23
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1008183	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	1163806	50.0000	46.86
	38	Trichloroethene	130	5.205	5.205	(1.048)	330245	50.0000	46.27
	39	Bromodichloromethane	83	5.726	5.726	(1.153)	432633	50.0000	46.77
	41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	212271	100.000	89.71
	42	1,2-Dichloropropane	63	5.433	5.433	(1.094)	325555	50.0000	46.49
	44	Dibromomethane	93	5.550	5.550	(1.118)	216805	50.0000	45.30
	45	4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	644425	100.000	94.11
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	501073	50.0000	47.34
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	954561	50.0000	
$	48	Toluene-d8	98	6.385	6.385	(0.833)	939847	50.0000	41.83
	50	Toluene	91	6.445	6.445	(0.841)	1246104	50.0000	46.84
	51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	415765	50.0000	46.80
	52	2-Hexanone	43	7.086	7.086	(0.924)	438931	100.000	95.49
	53	1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	251037	50.0000	47.34
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	508446	50.0000	46.91
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	378042	50.0000	49.40
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	253710	50.0000	45.89
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	313080	50.0000	48.33
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	253055	50.0000	43.38
	59	Chlorobenzene	112	7.690	7.690	(1.003)	864270	50.0000	47.15
	60	1,1,1,2-Tetrachloroethane	131	7.769	7.769	(1.013)	339679	50.0000	47.98

61 Ethylbenzene	106	7.795	7.795 (1.017)	430082	50.0000	47.51
62 m,p-Xylenes	106	7.900	7.900 (1.030)	1109770	100.000	95.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.237	8.237	(1.074)	531737	50.0000	46.60
	64 Styrene	104	8.256	8.256	(1.077)	951185	50.0000	50.13
	66 Bromoform	173	8.406	8.406	(1.096)	256325	50.0000	49.64
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1309182	50.0000	46.17
	68 1,1,2,2-Tetrachloroethane	83	8.833	8.833	(0.915)	420510	50.0000	46.63
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	440611	50.0000	46.77
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	553886	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	326171	50.0000	49.19(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1552046	50.0000	47.39
	74 Bromobenzene	156	8.803	8.803	(0.912)	419375	50.0000	47.37
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	1120554	50.0000	46.80
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	970543	50.0000	46.27
	77 4-Chlorotoluene	91	9.066	9.066	(0.939)	1143652	50.0000	47.39
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	941886	50.0000	45.91
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1141051	50.0000	46.28
	81 sec-Butylbenzene	105	9.516	9.516	(0.985)	1282761	50.0000	45.61
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	1159726	50.0000	45.61
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	746453	50.0000	47.34
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	797053	50.0000	47.20
	86 Benzyl Chloride	91	9.804	9.804	(1.279)	694747	50.0000	50.84
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	1021843	50.0000	41.63
	88 1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	749344	50.0000	47.08
	89 1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	72896	50.0000	47.80
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	482657	50.0000	45.82
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	188947	50.0000	48.72
	92 Naphthalene	128	11.540	11.540	(1.195)	1211199	50.0000	46.07
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	466122	50.0000	45.41
M	94 1,2-Dichloroethylene (total)	96				656987	100.000	
M	95 Xylenes (total)	106				1641507	150.000	
	141 Cyclohexane	56	4.121	4.121	(0.986)	340162	50.0000	40.96
	138 Freon TF	101	1.921	1.921	(0.459)	245533	50.0000	41.86
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	704530	50.0000	46.51
	146 Methyl Acetate	43	2.236	2.236	(0.535)	269607	50.0000	47.93
	148 Tert-Butyl alcohol	59	2.438	2.438	(0.583)	745105	1000.00	987.31
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	441739	1000.00	1005.43

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
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Column phase: DB624

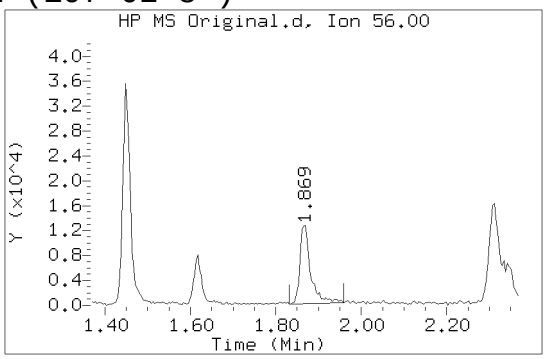
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 11-AUG-2023 13:56
InstruID : voa6.i
LabSampID : VSTD050

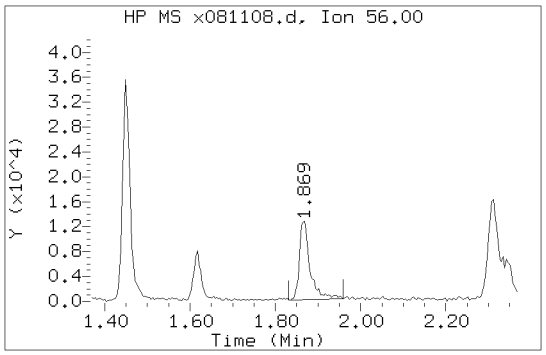
Acrolein (107-02-8)

Reason Code:

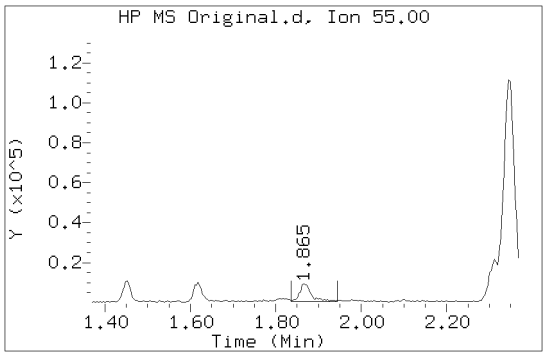
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12-Aug-2023
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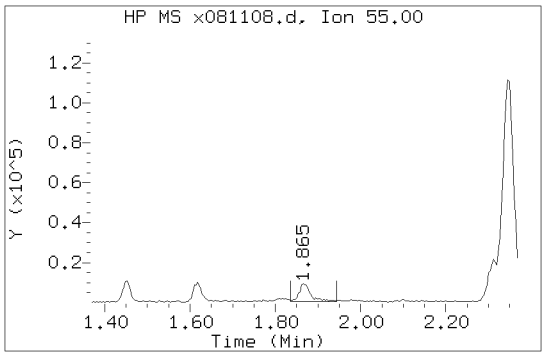
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12-Aug-2023
23:25



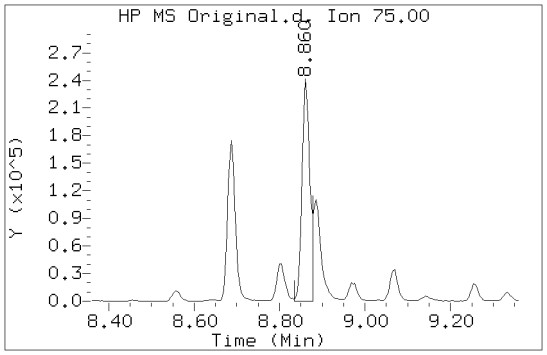
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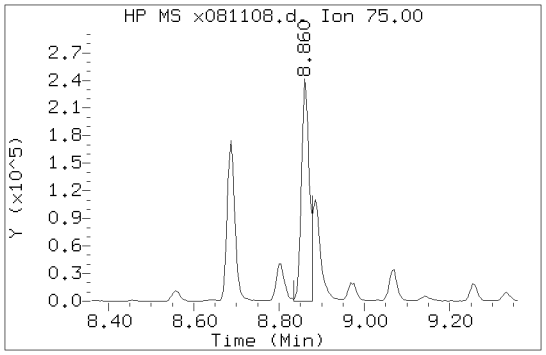
1,2,3-Trichloropropane (96-18-4)

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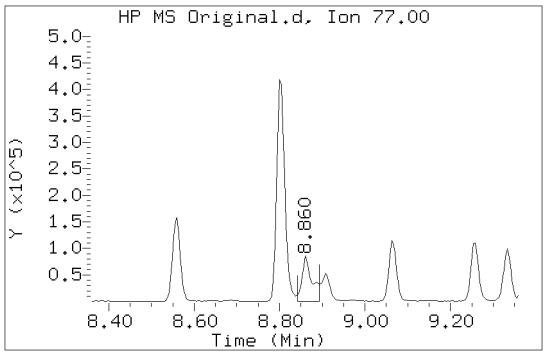
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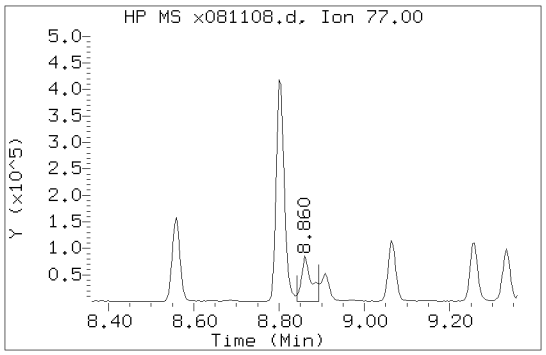
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12-Aug-2023
23:25



BEFORE
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AREA
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12-Aug-2023
23:25



AFTER
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12-Aug-2023
23:25

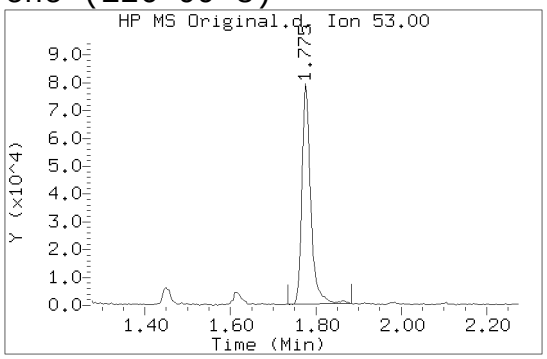


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LabSampID : VSTD050

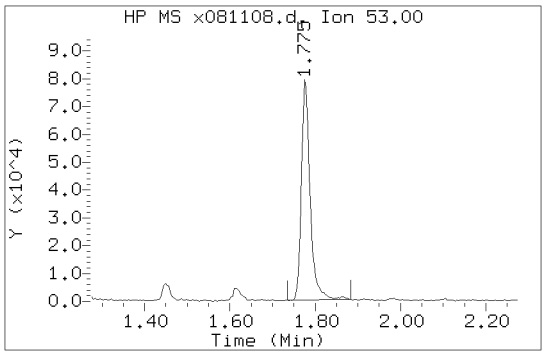
Chloroprene (126-99-8)

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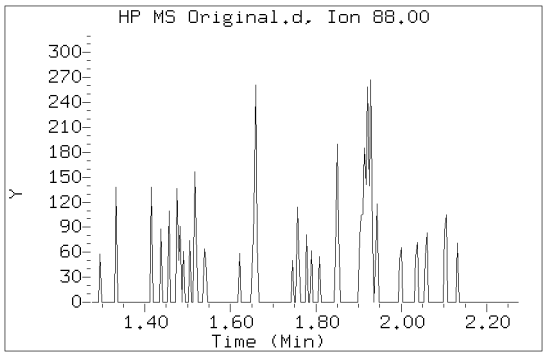
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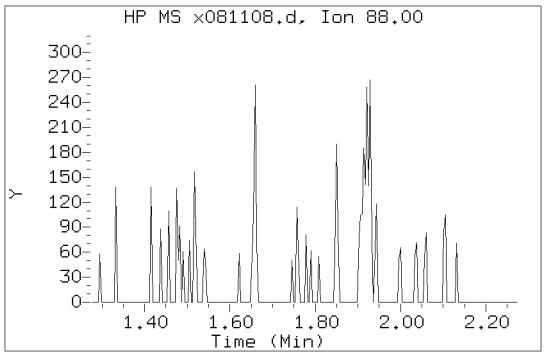
AFTER
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23:25



BEFORE
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12-Aug-2023
23:25



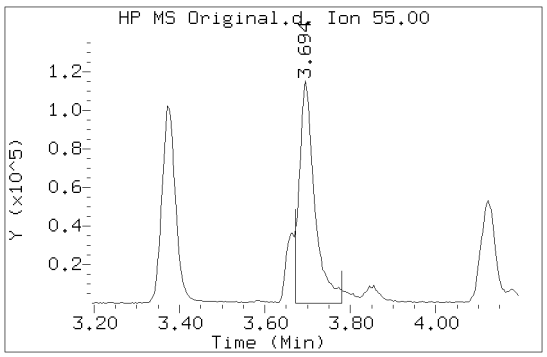
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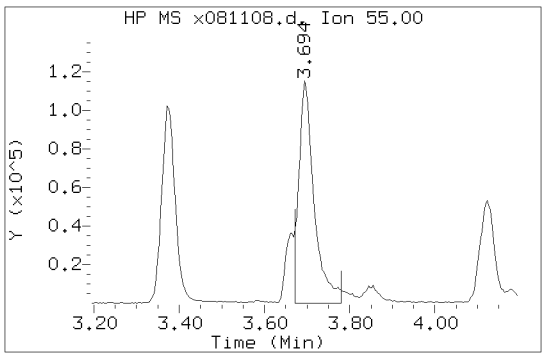
Methyl Acrylate (96-33-3)

Reason Code:

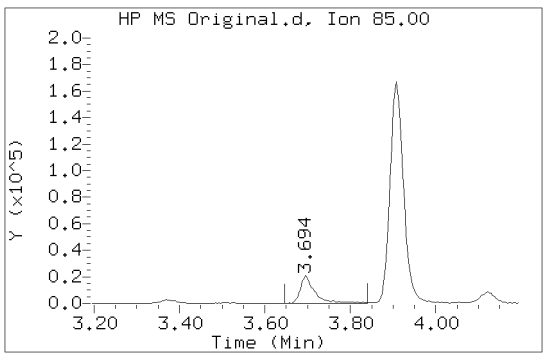
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12-Aug-2023
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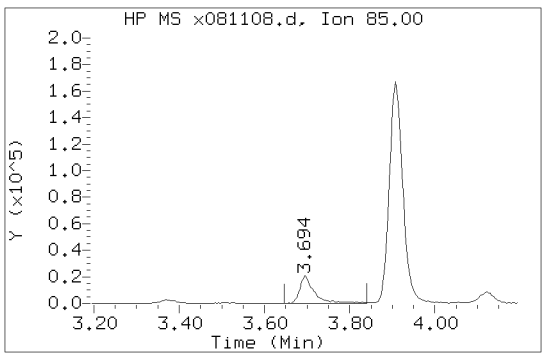
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BEFORE
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AFTER
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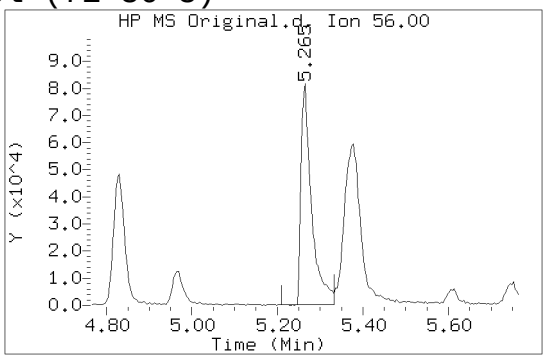


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Inj Date : 11-AUG-2023 13:56
InstruID : voa6.i
LabSampID : VSTD050

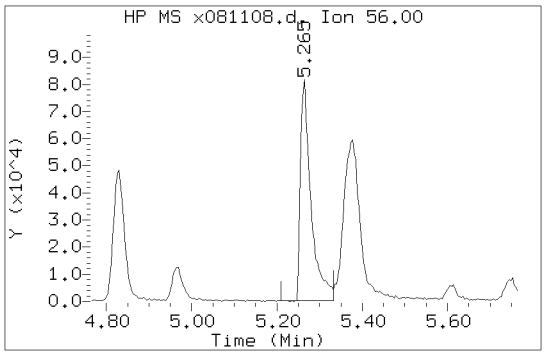
n-Butanol (71-36-3)

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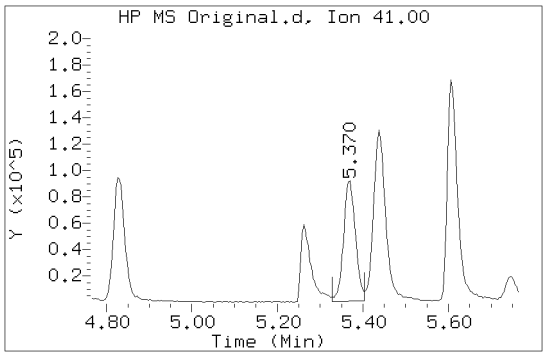
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12-Aug-2023
23:25



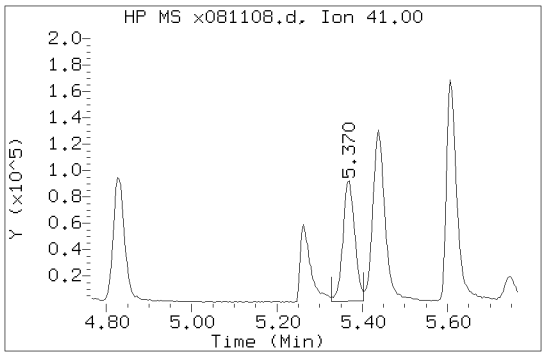
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23:25



BEFORE
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12-Aug-2023
23:25



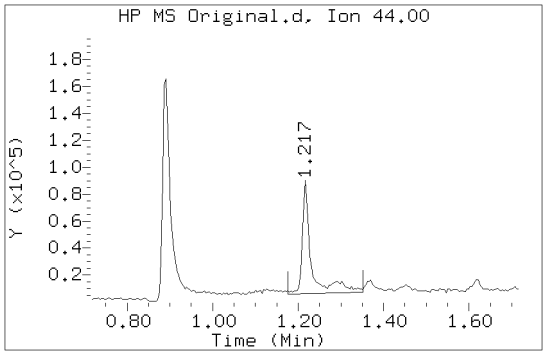
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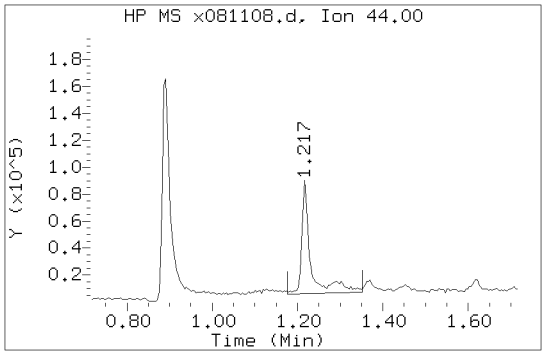
Acetaldehyde (75-07-0)

Reason Code:

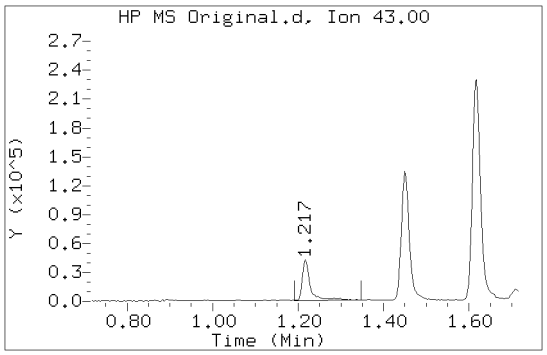
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12-Aug-2023
23:25



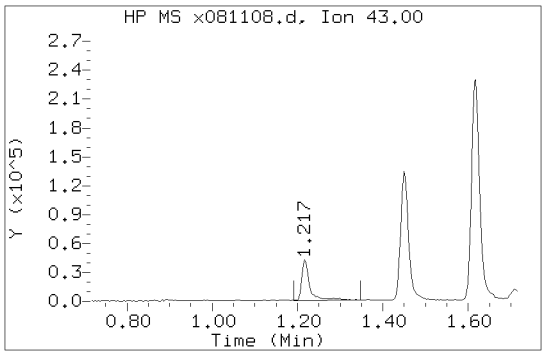
AFTER
MASS
44
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84050
12-Aug-2023
23:25



BEFORE
MASS
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AREA
58189
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23:25



AFTER
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12-Aug-2023
23:25



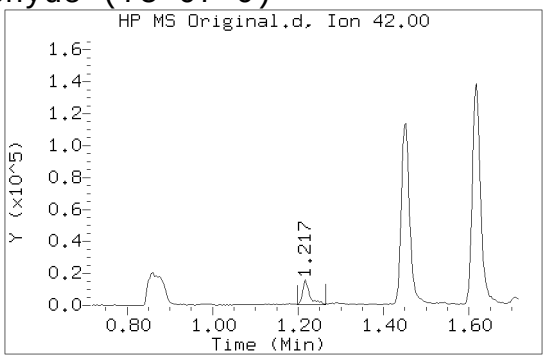
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Inj Date : 11-AUG-2023 13:56
InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

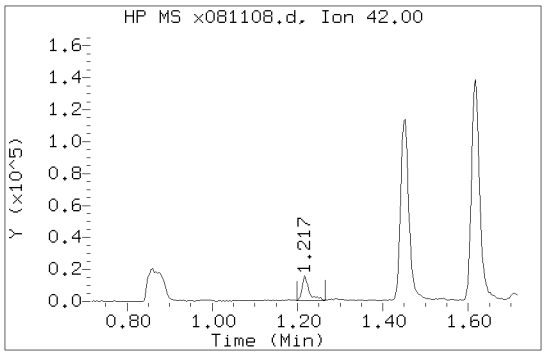
BEFORE

MASS
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23:25



AFTER

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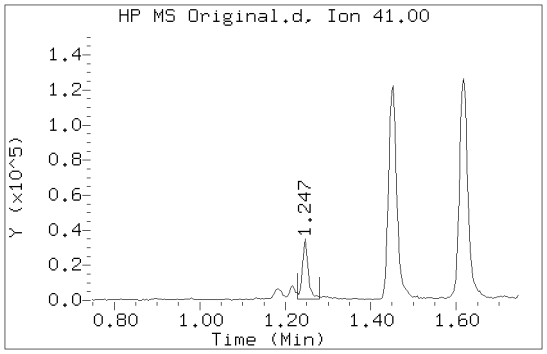


Isobutylene (115-11-7)

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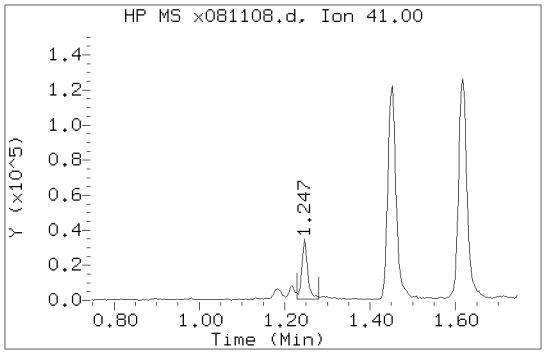
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23:25



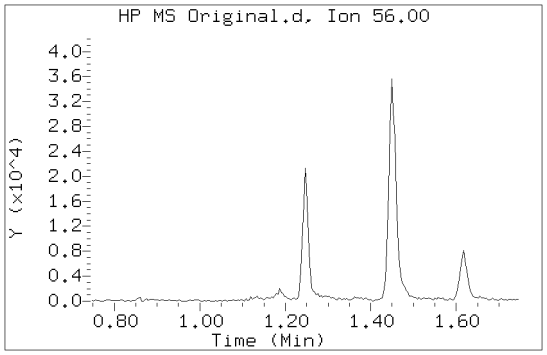
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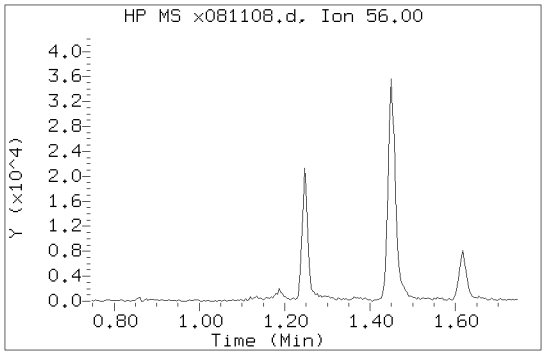
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12-Aug-2023
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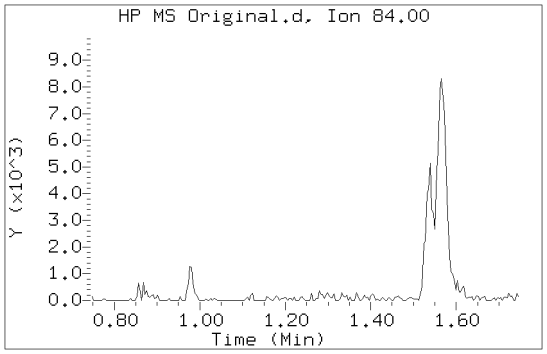
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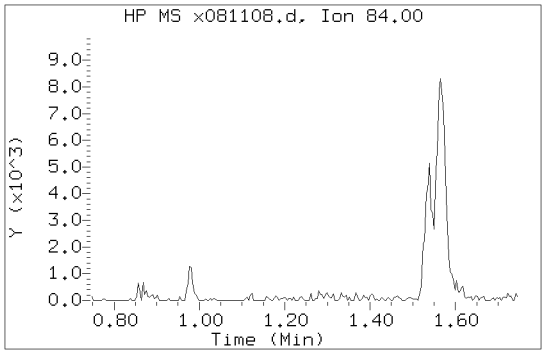
BEFORE

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12-Aug-2023
23:25



AFTER

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12-Aug-2023
23:25



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Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081109.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 11-AUG-2023 14:17
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 13:56 Cal File: X081108.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	640506	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	160962	2000.00	1977.09
140 1,3-Butadiene	54	1.171	1.171	(0.280)	674061	100.000	102.14
25 Methacrylonitrile	41	3.821	3.821	(0.914)	650336	100.000	101.80
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	2032055	2000.00	2023.96
13 Acetonitrile	39	2.202	2.202	(0.527)	956437	1000.00	968.26
14 Allyl Chloride	41	2.202	2.202	(0.527)	1838118	100.000	94.20
4 Propionitrile	54	3.660	3.660	(0.875)	922962	1000.00	1034.73
136 n-Hexane	57	2.772	2.772	(0.663)	828407	100.000	100.12
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	253731	100.000	100.45(H)
194 Acetaldehyde	44	1.216	1.216	(0.291)	249925	400.000	394.98(M)
23 Chloroprene	53	1.775	1.775	(0.424)	279143	100.000	103.02
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	1341041	100.000	104.28
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1435957	100.000	108.87
139 Diethyl ether	59	1.763	1.763	(0.422)	534429	100.000	94.53
130 Ethyl Acetate	43	3.660	3.660	(0.875)	720887	100.000	98.05
40 Methyl Methacrylate	41	5.606	5.606	(1.341)	608078	100.000	103.18
49 Ethyl Methacrylate	69	6.786	6.786	(1.366)	947621	100.000	101.25(H)
132 n-Butanol	56	5.261	5.261	(1.258)	333572	2000.00	1902.85(M)
142 Tetrahydrofuran	42	3.848	3.848	(0.920)	238972	200.000	191.26

150	Allyl alcohol	57	2.772	2.772 (0.663)	828407	2000.00	2002.64
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	2730695	100.000	97.30

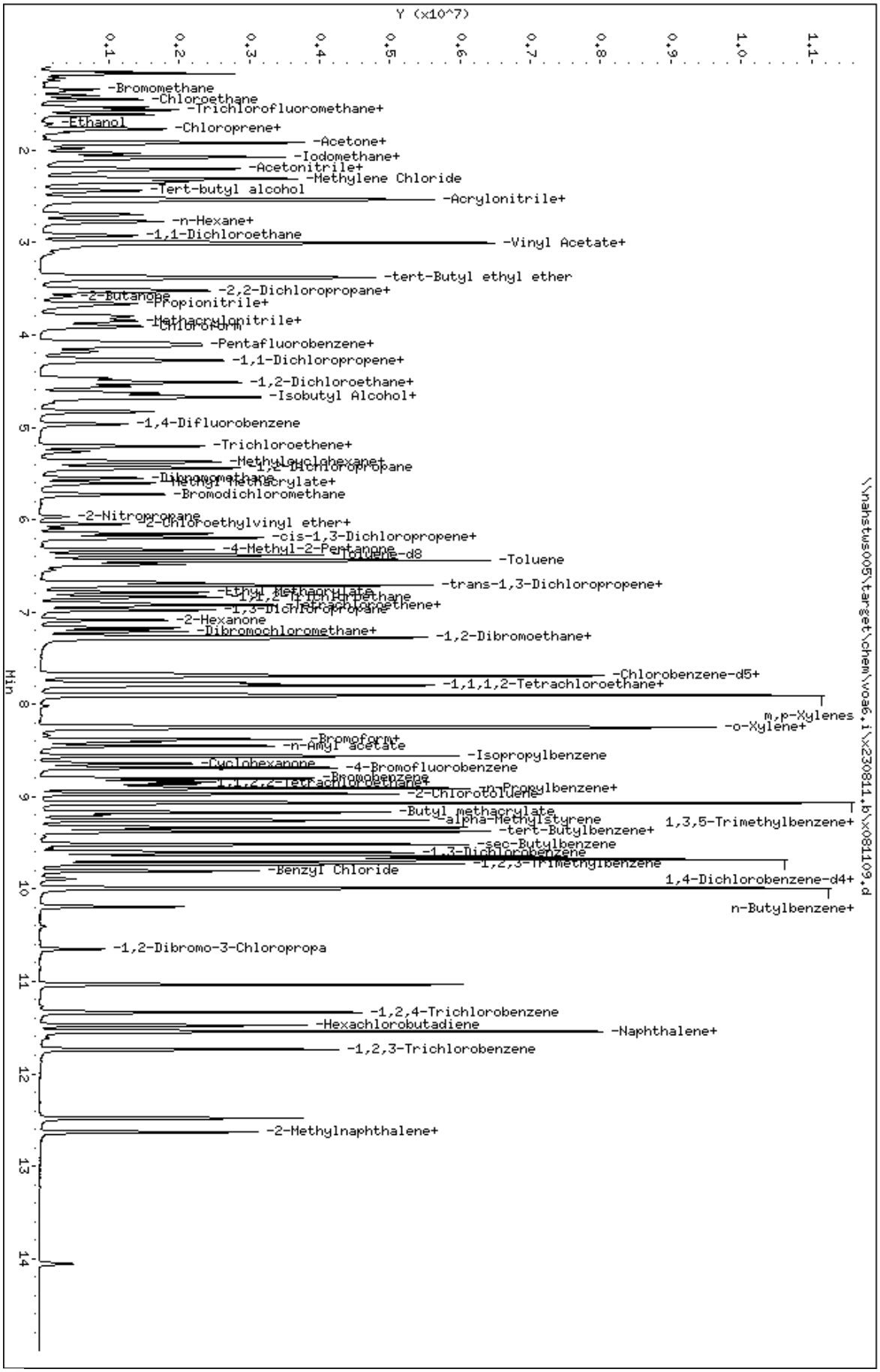
			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	131	Methyl Acrylate	55	3.690	3.690	(0.883)	609738	100.000	96.35(M)
	162	Butyl acrylate	55	8.248	8.248	(1.076)	1671356	100.000	102.43
	2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	619342	100.000	104.73
	3	Chloromethane	50	1.085	1.085	(0.260)	615114	100.000	98.69
	5	Vinyl Chloride	62	1.149	1.149	(0.275)	792366	100.000	103.13
	6	Bromomethane	94	1.343	1.343	(0.321)	402009	100.000	97.21
	7	Chloroethane	64	1.407	1.407	(0.337)	487182	100.000	96.75
	8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	1143221	100.000	104.55
	9	Acrolein	56	1.865	1.865	(0.446)	42571	200.000	205.58(M)
	10	Acetone	43	1.977	1.977	(0.473)	518775	200.000	214.49
	11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	621762	100.000	100.53
	15	Iodomethane	142	2.033	2.033	(0.486)	1612228	200.000	206.83
	16	Acrylonitrile	53	2.536	2.536	(0.606)	573307	200.000	192.42
	17	Methylene Chloride	84	2.307	2.307	(0.552)	703194	100.000	90.66
	18	Methyl tert-butyl ether	73	2.539	2.539	(0.607)	2072249	100.000	93.93
	19	Carbon Disulfide	76	2.074	2.074	(0.496)	3782366	200.000	206.06
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	694934	100.000	96.69
	21	Vinyl Acetate	43	3.000	3.000	(0.718)	4323501	200.000	203.36
	22	1,1-Dichloroethane	63	2.925	2.925	(0.700)	1279476	100.000	94.52
	24	2-Butanone	43	3.581	3.581	(0.857)	533010	200.000	224.81(H)
	26	2,2-Dichloropropane	77	3.510	3.510	(0.840)	949589	100.000	104.52
	27	cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	700204	100.000	101.44
	28	Chloroform	83	3.908	3.908	(0.935)	1177710	100.000	99.27
	29	Bromochloromethane	128	3.795	3.795	(0.908)	383542	100.000	97.75
$	30	Dibromofluoromethane	113	4.099	4.099	(0.980)	623623	100.000	107.10
	31	1,1,1-Trichloroethane	97	4.084	4.084	(0.977)	1017489	100.000	106.82
	32	1,1-Dichloropropene	75	4.279	4.279	(0.861)	871919	100.000	108.47(H)
	33	1,2-Dichloroethane	62	4.556	4.556	(0.917)	944663	100.000	97.27
	34	Carbon Tetrachloride	117	4.264	4.264	(0.858)	885624	100.000	104.37(H)
$	35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	683505	100.000	105.68
*	36	1,4-Difluorobenzene	114	4.968	4.968	(1.000)	1021527	50.0000	
	37	Benzene	78	4.511	4.511	(0.908)	2519479	100.000	100.13
	38	Trichloroethene	130	5.205	5.205	(1.048)	731094	100.000	101.10
	39	Bromodichloromethane	83	5.726	5.726	(1.152)	922185	100.000	98.40
	41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	484488	200.000	202.09
	42	1,2-Dichloropropane	63	5.437	5.437	(1.094)	698386	100.000	98.43
	44	Dibromomethane	93	5.553	5.553	(1.118)	455344	100.000	93.91
	45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	1413537	200.000	196.71
	46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	1105204	100.000	103.06
*	47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	1001756	50.0000	
$	48	Toluene-d8	98	6.385	6.385	(0.833)	2278710	100.000	96.65
	50	Toluene	91	6.445	6.445	(0.841)	2797148	100.000	100.20
	51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.344)	937127	100.000	104.12
	52	2-Hexanone	43	7.086	7.086	(0.924)	957766	200.000	198.56
	53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	546052	100.000	98.13
	54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	1090432	100.000	95.86
	55	Dibromochloromethane	129	7.173	7.173	(0.935)	821062	100.000	102.24
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	624399	100.000	107.62
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	664741	100.000	97.79
	58	1-Chlorohexane	55	7.694	7.694	(1.548)	641164	100.000	108.48
	59	Chlorobenzene	112	7.690	7.690	(1.003)	1909593	100.000	99.28
	60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	762918	100.000	102.68

61 Ethylbenzene	106	7.799	7.799 (1.017)	979780	100.000	103.15
62 m,p-Xylenes	106	7.900	7.900 (1.030)	2516682	200.000	207.12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63	o-Xylene	106	8.237	8.237	(1.074)	1210239	100.000	101.07
64	Styrene	104	8.256	8.256	(1.077)	2100825	100.000	105.50
66	Bromoform	173	8.406	8.406	(1.096)	593398	100.000	109.52
67	Isopropylbenzene	105	8.560	8.560	(1.116)	3137727	100.000	105.45
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	923133	100.000	93.79
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1004363	100.000	101.27
* 70	1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	604590	50.0000	
71	1,2,3-Trichloropropane	75	8.859	8.859	(0.917)	670063	100.000	92.58(M)
73	n-Propylbenzene	91	8.908	8.908	(0.922)	3787376	100.000	105.94
74	Bromobenzene	156	8.803	8.803	(0.912)	935104	100.000	96.76
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	2731821	100.000	104.53
76	2-Chlorotoluene	91	8.972	8.972	(0.929)	2211513	100.000	96.60
77	4-Chlorotoluene	91	9.066	9.066	(0.939)	2657540	100.000	100.89
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	2375406	100.000	106.09
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	2757148	100.000	102.45
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	3405673	100.000	110.95
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	3028640	100.000	109.13
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1735850	100.000	100.86
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	1833747	100.000	99.48
86	Benzyl Chloride	91	9.804	9.804	(1.279)	1725503	100.000	120.33
87	n-Butylbenzene	91	9.988	9.988	(1.034)	2801951	100.000	101.53
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1749811	100.000	100.72
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	172155	100.000	103.43
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1231235	100.000	107.10
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	585400	100.000	100.10
92	Naphthalene	128	11.540	11.540	(1.195)	2873022	100.000	100.12
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	1130429	100.000	100.90
M 94	1,2-Dichloroethylene (total)	96				1395138	200.000	
M 95	Xylenes (total)	106				3726921	300.000	
141	Cyclohexane	56	4.121	4.121	(0.986)	918146	100.000	105.04
138	Freon TF	101	1.921	1.921	(0.459)	646829	100.000	105.98
147	Methylcyclohexane	55	5.381	5.381	(1.083)	1626175	100.000	105.96(A)
146	Methyl Acetate	43	2.236	2.236	(0.535)	552039	100.000	95.91
148	Tert-Butyl alcohol	59	2.438	2.438	(0.583)	1555693	2000.00	2028.00
149	Isopropyl Alcohol	45	2.101	2.101	(0.502)	902720	2000.00	2020.78

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081109.d
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Sample Info: VSTD100;VSTD100;1;8;
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Column phase: DB624

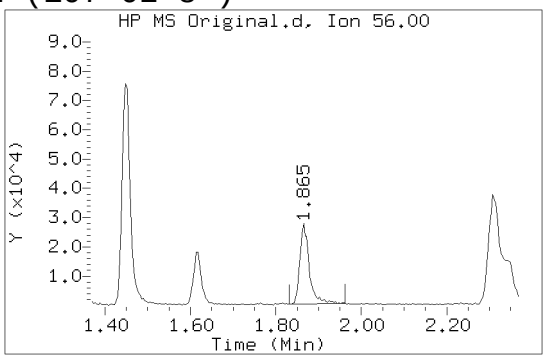
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Operator: PC
Column diameter: 0.18

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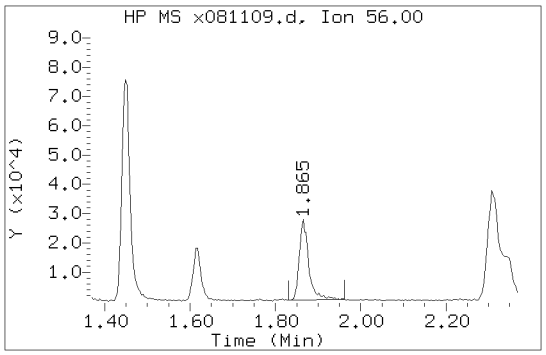
Acrolein (107-02-8)

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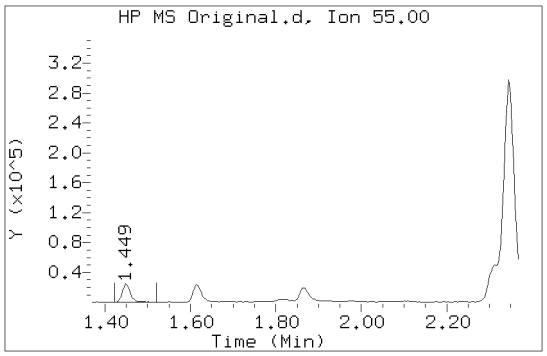
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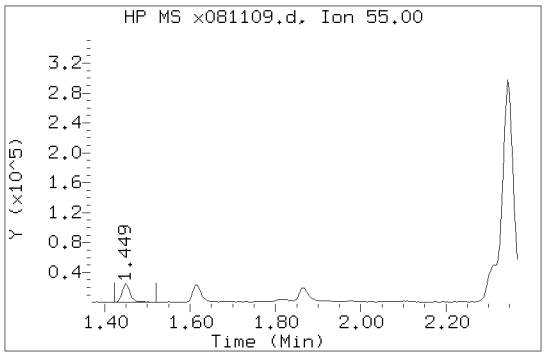
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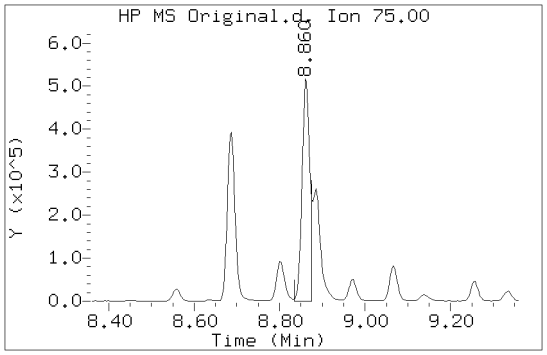
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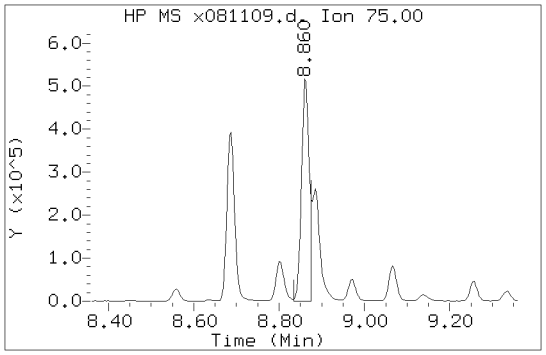
1,2,3-Trichloropropane (96-18-4)

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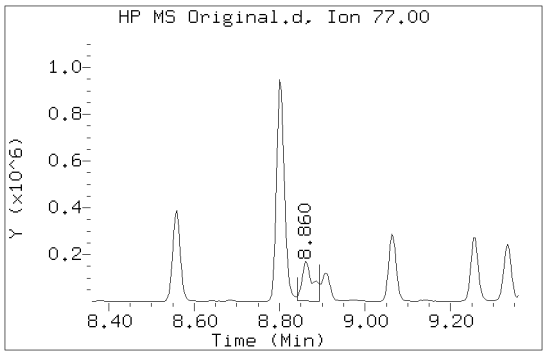
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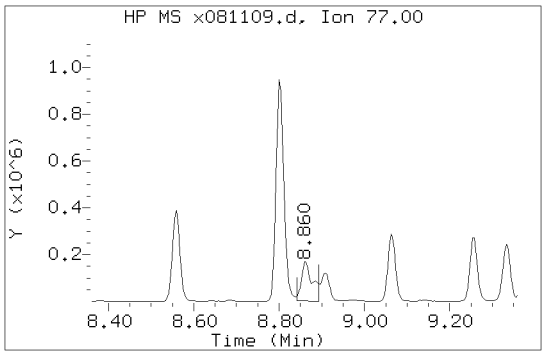
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AFTER
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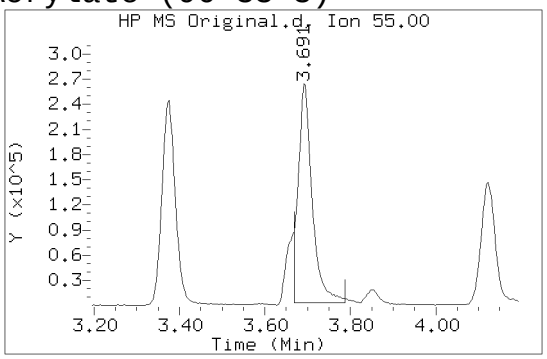


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LabSampID : VSTD100

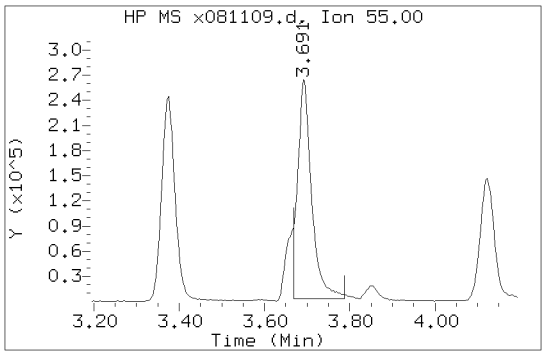
Methyl Acrylate (96-33-3)

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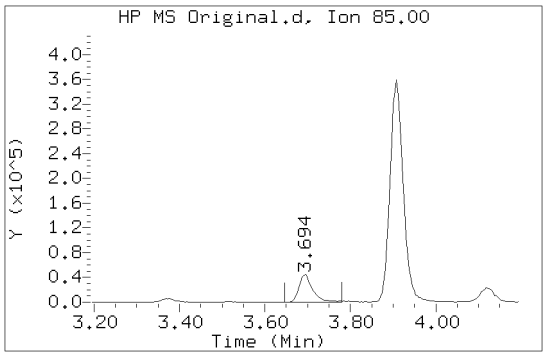
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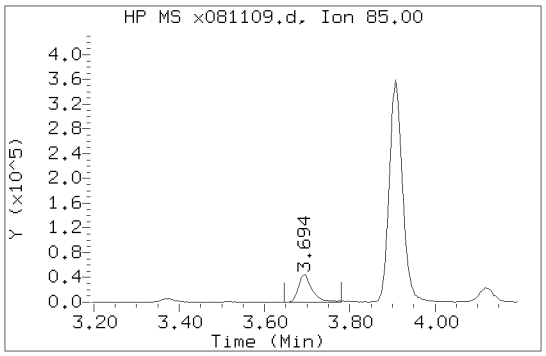
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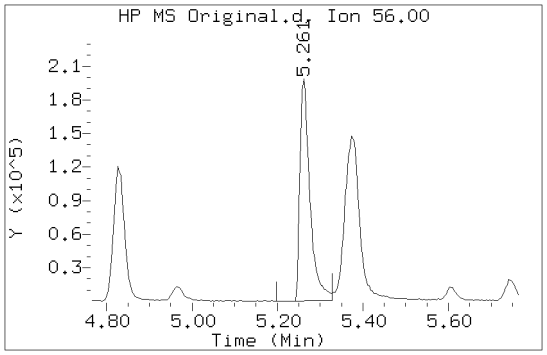
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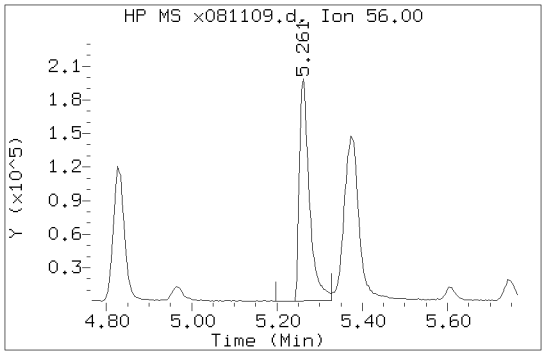
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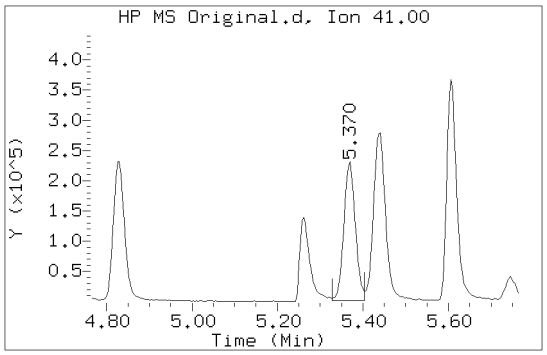
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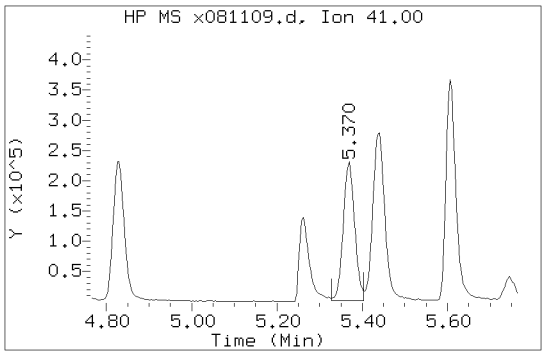
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AFTER
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12-Aug-2023
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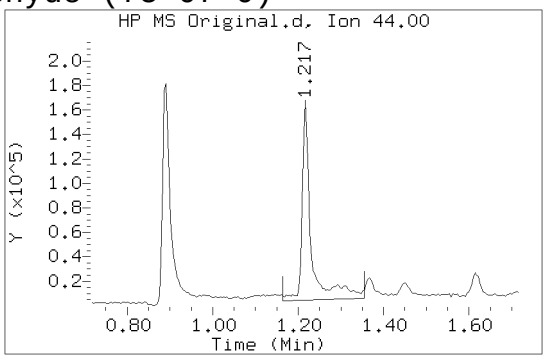


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InstruID : voa6.i
LabSampID : VSTD100

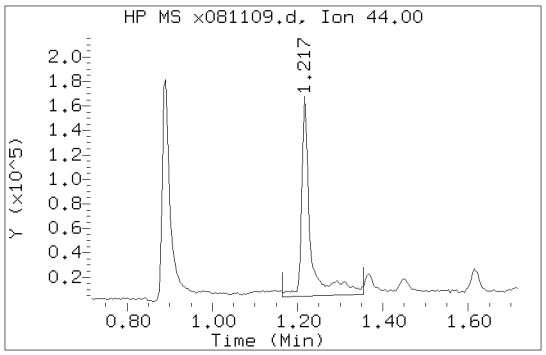
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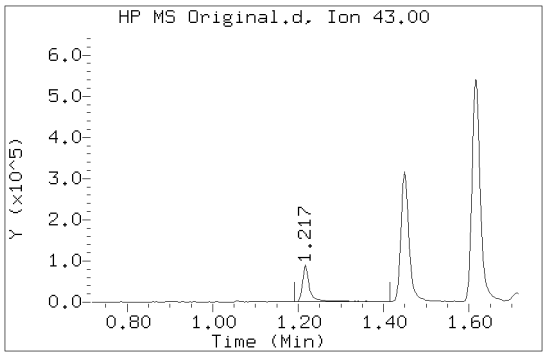
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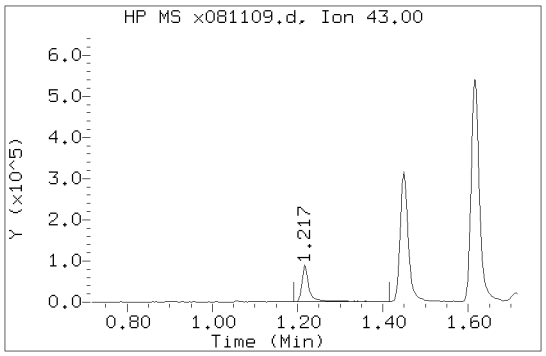
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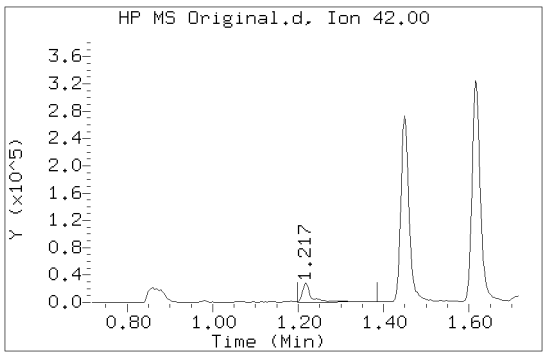
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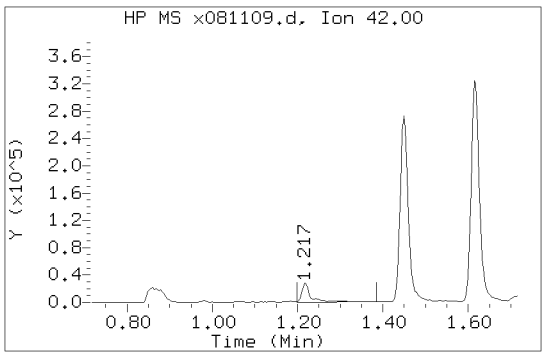
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BEFORE
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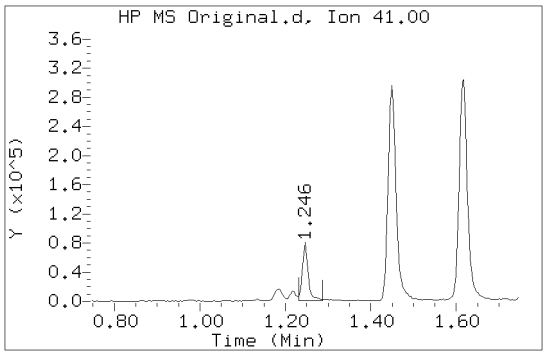
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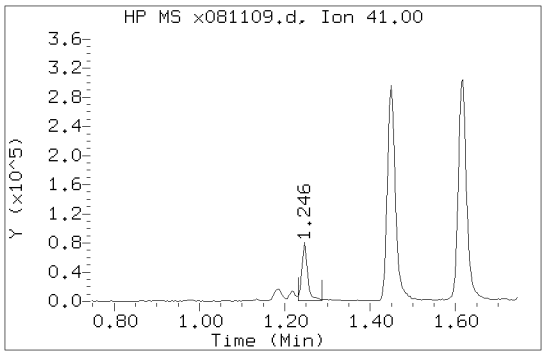
Isobutylene (115-11-7)

Reason Code:

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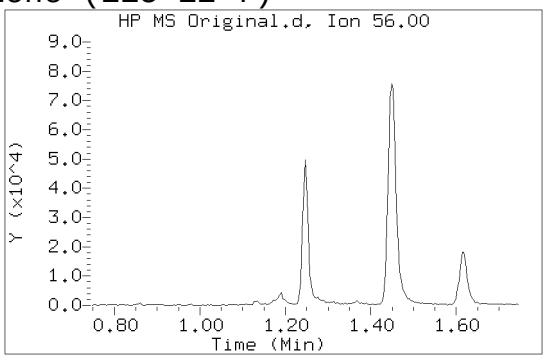


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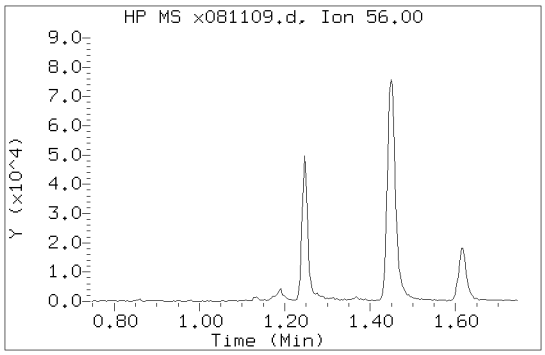
Isobutylene (115-11-7)

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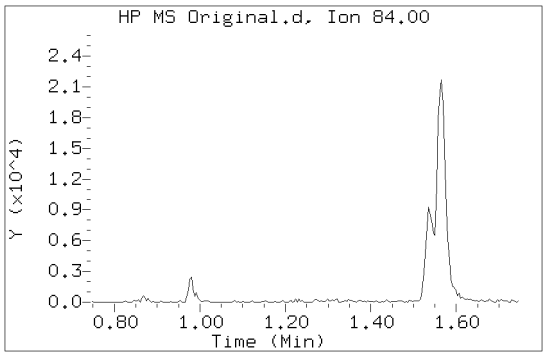
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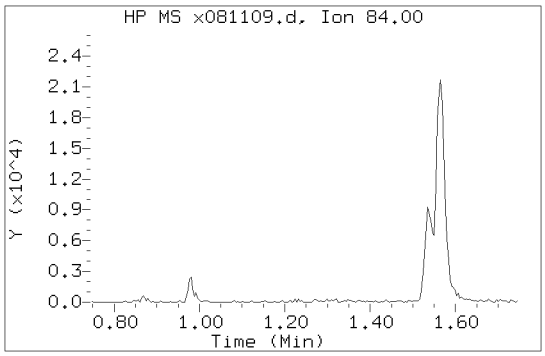
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BEFORE
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22:49



AFTER
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AREA
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HEIGHT
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12-Aug-2023
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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081110.D Page 1
Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081110.D
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Inj Date : 11-AUG-2023 14:37
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
Comment   :
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Cal Date : 11-AUG-2023 14:17 Cal File: X081109.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	682557	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	255690	3000.00	2947.15
140 1,3-Butadiene	54	1.171	1.171	(0.280)	1049812	150.000	149.29
25 Methacrylonitrile	41	3.821	3.821	(0.914)	1028369	150.000	151.06
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	3257307	3000.00	3044.45
13 Acetonitrile	39	2.202	2.202	(0.527)	1486538	1500.00	1412.20
14 Allyl Chloride	41	2.202	2.202	(0.527)	2841635	150.000	136.65
4 Propionitrile	54	3.660	3.660	(0.875)	1468203	1500.00	1544.59
136 n-Hexane	57	2.772	2.772	(0.663)	1302336	150.000	104.64
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	414511	150.000	158.66(H)
194 Acetaldehyde	44	1.216	1.216	(0.291)	348100	600.000	518.89(M)
23 Chloroprene	53	1.775	1.775	(0.424)	431981	150.000	149.60
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	2162289	150.000	159.04
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	2323556	150.000	170.32
139 Diethyl ether	59	1.760	1.760	(0.421)	835572	150.000	138.69
130 Ethyl Acetate	43	3.660	3.660	(0.875)	1105978	150.000	141.16
40 Methyl Methacrylate	41	5.606	5.606	(1.341)	959369	150.000	152.76
49 Ethyl Methacrylate	69	6.787	6.787	(1.367)	1511594	150.000	156.14(H)
132 n-Butanol	56	5.261	5.261	(1.258)	550912	3000.00	2911.71(M)
142 Tetrahydrofuran	42	3.855	3.855	(0.922)	378357	300.000	284.16

150	Allyl alcohol	57	2.772	2.772 (0.663)	1302336	3000.00	2098.45
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	4504971	150.000	151.84

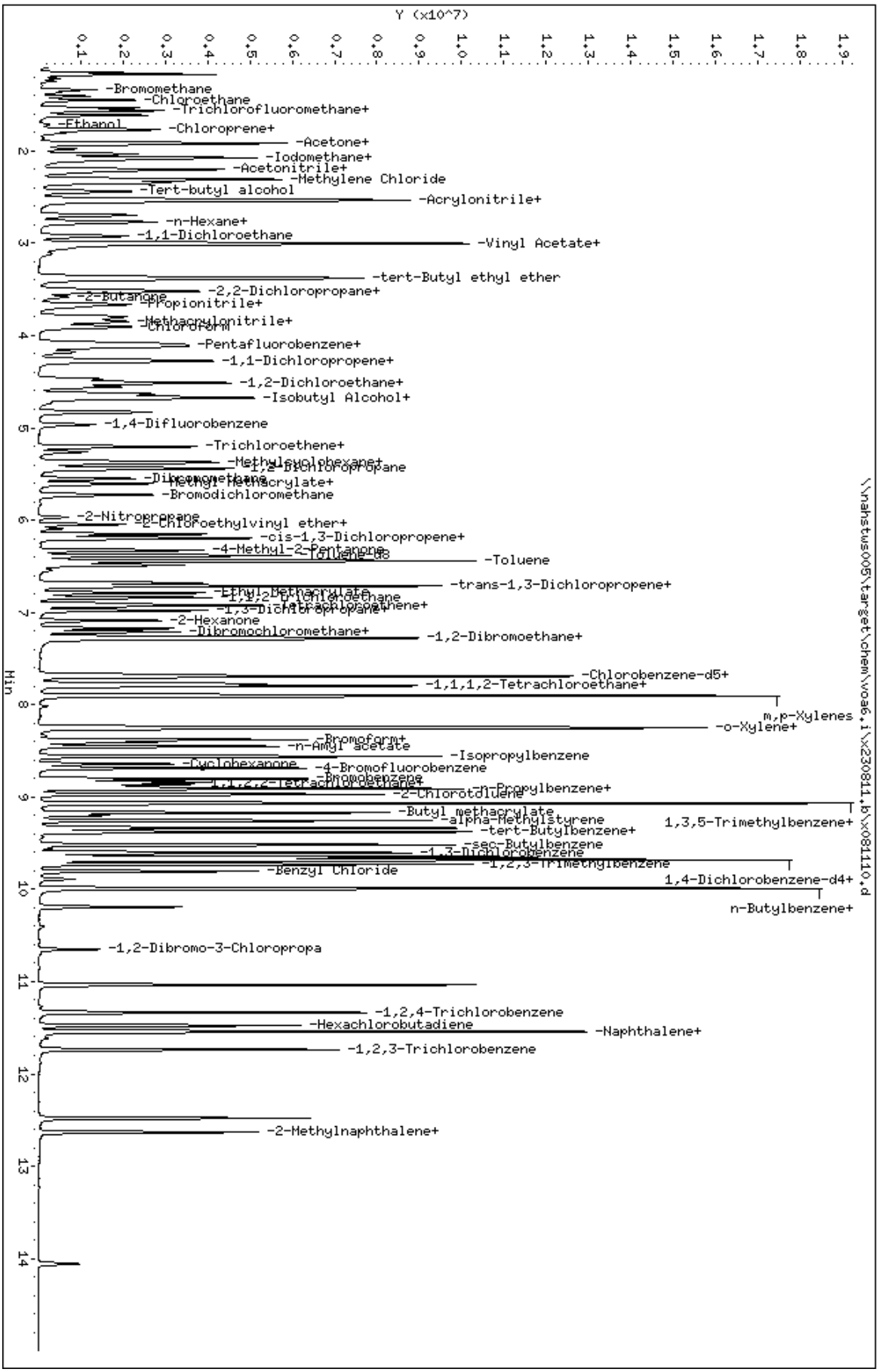
							AMOUNTS	
		QUANT SIG					CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	131 Methyl Acrylate	55	3.690	3.690	(0.883)	959104	150.000	142.23(M)
	162 Butyl acrylate	55	8.248	8.248	(1.076)	2811097	150.000	166.56
	2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	959873	150.000	152.01
	3 Chloromethane	50	1.085	1.085	(0.260)	1033366	150.000	155.58
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	1233792	150.000	150.70
	6 Bromomethane	94	1.340	1.340	(0.320)	666095	150.000	151.14
	7 Chloroethane	64	1.403	1.403	(0.336)	735302	150.000	137.03
	8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	1752801	150.000	150.43
	9 Acrolein	56	1.865	1.865	(0.446)	67360	300.000	306.58(M)
	10 Acetone	43	1.977	1.977	(0.473)	740284	300.000	288.78
	11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	951773	150.000	144.41
	15 Iodomethane	142	2.033	2.033	(0.486)	2614120	300.000	300.47
	16 Acrylonitrile	53	2.536	2.536	(0.606)	895015	300.000	281.89
	17 Methylene Chloride	84	2.307	2.307	(0.552)	1057034	150.000	127.89
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.607)	3266231	150.000	138.93
	19 Carbon Disulfide	76	2.074	2.074	(0.496)	5854691	300.000	299.32
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	1070098	150.000	139.71
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	6781651	300.000	299.33
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	1933143	150.000	134.02
	24 2-Butanone	43	3.581	3.581	(0.857)	818491	300.000	323.95(H)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	1464683	150.000	151.29
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	1081309	150.000	147.01
	28 Chloroform	83	3.908	3.908	(0.935)	1802396	150.000	142.57
	29 Bromochloromethane	128	3.795	3.795	(0.908)	589388	150.000	140.95
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	899883	150.000	145.32
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	1578919	150.000	155.56
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1351358	150.000	162.53(H)
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	1466021	150.000	145.95
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	1397869	150.000	159.26(H)
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	1002392	150.000	145.86
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1056642	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	3908377	150.000	150.17
	38 Trichloroethene	130	5.205	5.205	(1.048)	1148907	150.000	153.60
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	1422892	150.000	146.79
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	760740	300.000	306.78
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	1090098	150.000	148.54
	44 Dibromomethane	93	5.549	5.549	(1.118)	707705	150.000	141.11
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	2231658	300.000	300.25
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1732908	150.000	156.23
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	1036166	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	3265638	150.000	133.91
	50 Toluene	91	6.445	6.445	(0.841)	4375788	150.000	151.55
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1478264	150.000	158.79
	52 2-Hexanone	43	7.086	7.086	(0.924)	1506153	300.000	301.88
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	848391	150.000	147.41
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	1713601	150.000	145.65
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	1287377	150.000	154.99
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	984117	150.000	163.99
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	1046609	150.000	148.86
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	1018816	150.000	166.64
	59 Chlorobenzene	112	7.690	7.690	(1.003)	3004501	150.000	151.02
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	1197588	150.000	155.84

61 Ethylbenzene	106	7.799	7.799 (1.017)	1517668	150.000	154.47
62 m,p-Xylenes	106	7.900	7.900 (1.030)	3983320	300.000	316.94

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	63 o-Xylene	106	8.237	8.237	(1.074)	1909743	150.000	154.19
	64 Styrene	104	8.256	8.256	(1.077)	3359185	150.000	163.10
	66 Bromoform	173	8.406	8.406	(1.096)	961597	150.000	171.58
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	4996090	150.000	162.33
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1494265	150.000	143.61
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1512449	150.000	147.32
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	639168	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	1156800	150.000	151.18(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	6042746	150.000	159.89
	74 Bromobenzene	156	8.803	8.803	(0.912)	1487827	150.000	145.63
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	4493957	150.000	162.66
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	3514835	150.000	145.23
	77 4-Chlorotoluene	91	9.066	9.066	(0.939)	4275271	150.000	153.53
	78 tert-Butylbenzene	119	9.336	9.336	(0.967)	3846046	150.000	162.48
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	4471143	150.000	157.15
	81 sec-Butylbenzene	105	9.519	9.519	(0.986)	5518096	150.000	170.05
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	4934529	150.000	168.19
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	2786963	150.000	153.17
	84 1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	2958090	150.000	151.80
	86 Benzyl Chloride	91	9.804	9.804	(1.279)	2836865	150.000	191.27
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	4582820	150.000	155.98
	88 1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	2797744	150.000	152.33
	89 1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	274172	150.000	155.81
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	2015081	150.000	165.80
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	980720	150.000	102.28
	92 Naphthalene	128	11.540	11.540	(1.195)	4621623	150.000	152.35
	93 1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	1834293	150.000	154.87
M	94 1,2-Dichloroethylene (total)	96				2151407	300.000	
M	95 Xylenes (total)	106				5893063	450.000	
	141 Cyclohexane	56	4.121	4.121	(0.986)	1454384	150.000	155.24(A)
	138 Freon TF	101	1.921	1.921	(0.459)	1017540	150.000	155.92
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	2620423	150.000	165.07(A)
	146 Methyl Acetate	43	2.232	2.232	(0.534)	831062	150.000	135.49
	148 Tert-Butyl alcohol	59	2.438	2.438	(0.583)	2402568	3000.00	2944.86
	149 Isopropyl Alcohol	45	2.101	2.101	(0.502)	1400869	3000.00	2948.60

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

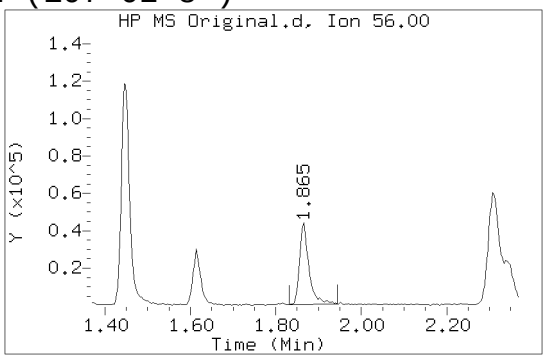
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Operator: PC
Column diameter: 0.18

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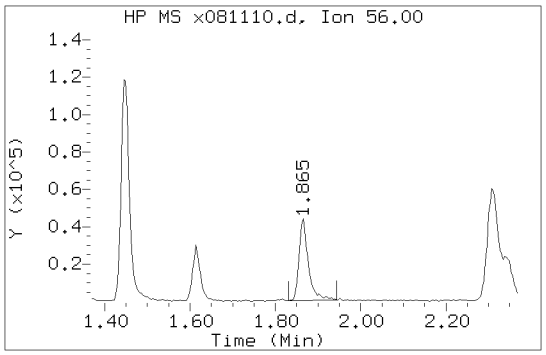
Acrolein (107-02-8)

Reason Code:

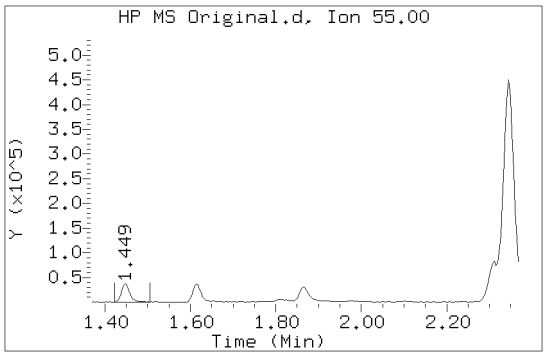
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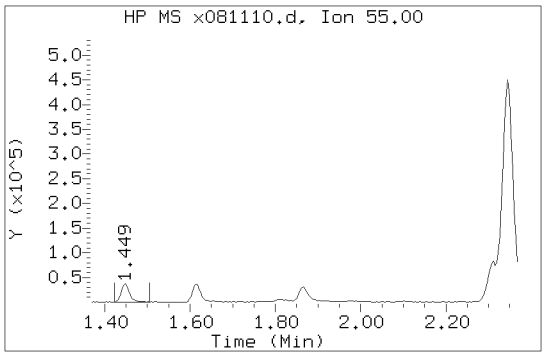
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12-Aug-2023
22:49



BEFORE
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22:49



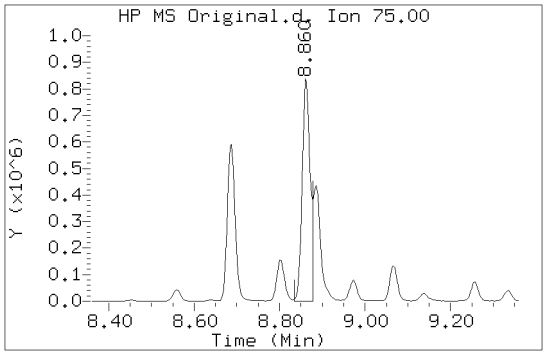
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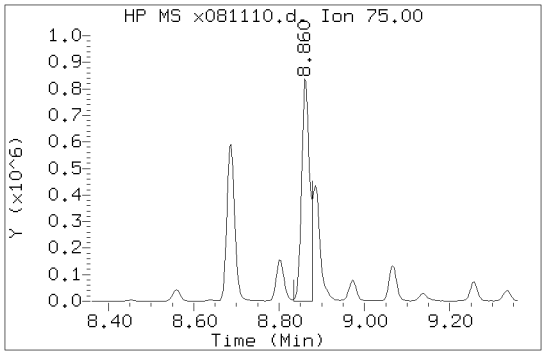
1,2,3-Trichloropropane (96-18-4)

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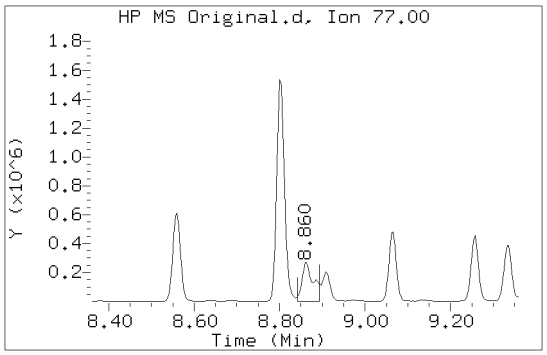
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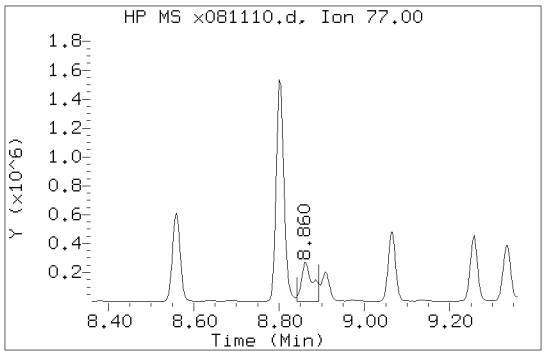
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BEFORE
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AFTER
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12-Aug-2023
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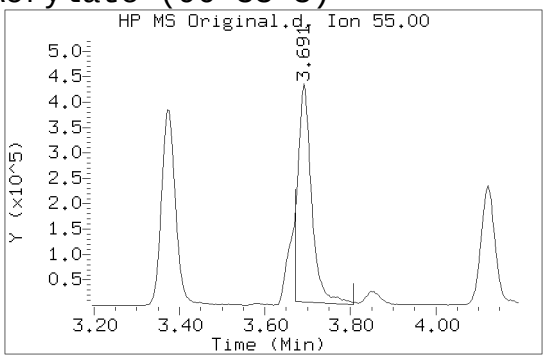


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InstruID : voa6.i
LabSampID : VSTD150

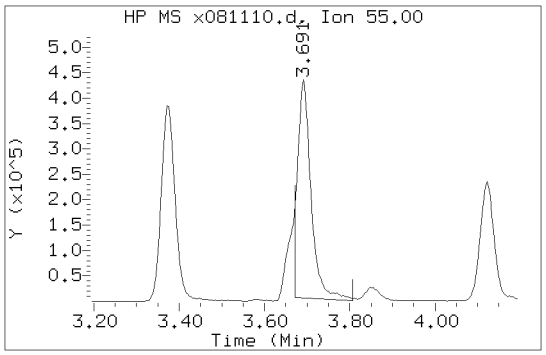
Methyl Acrylate (96-33-3)

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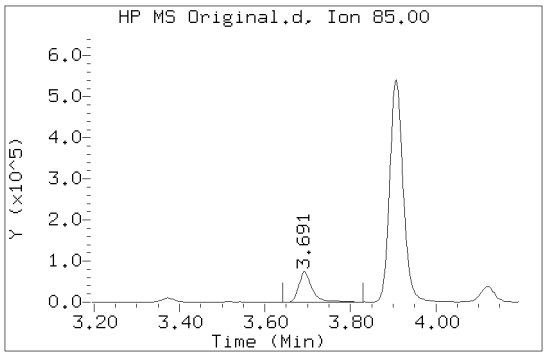
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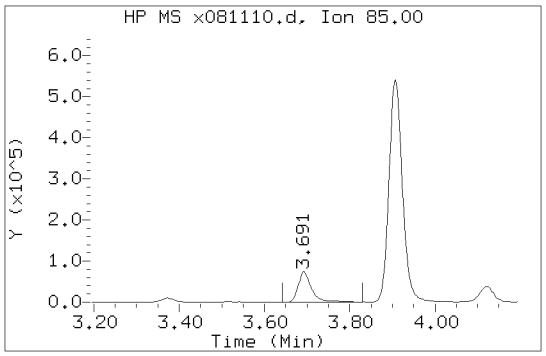
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BEFORE
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12-Aug-2023
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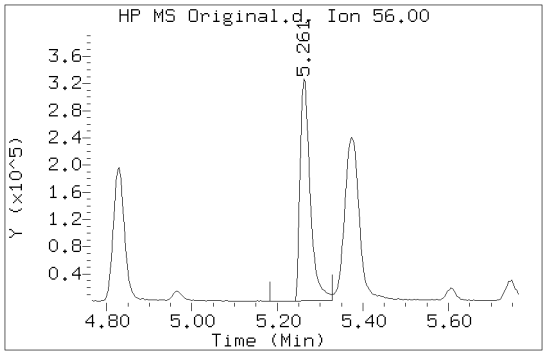
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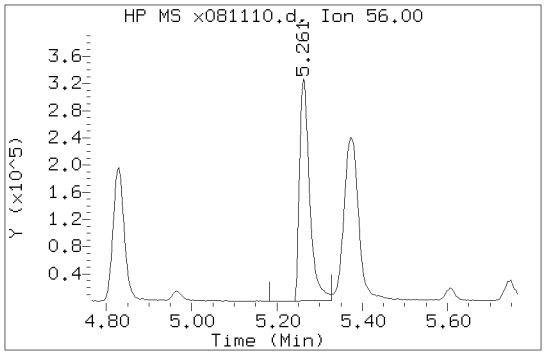
n-Butanol (71-36-3)

Reason Code:

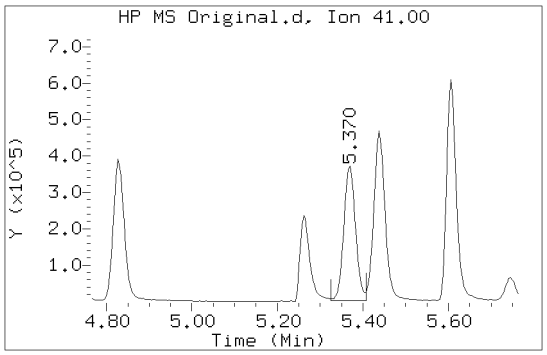
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22:49



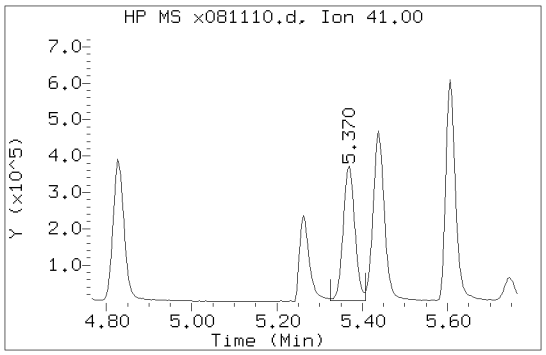
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BEFORE
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AFTER
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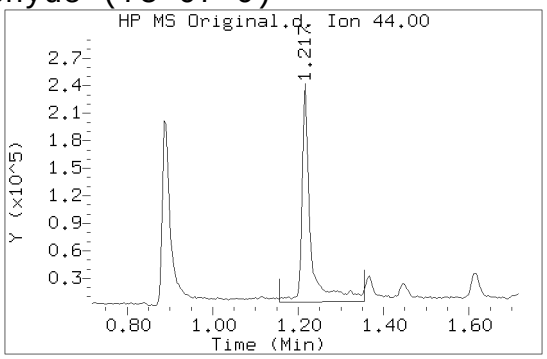


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InstruID : voa6.i
LabSampID : VSTD150

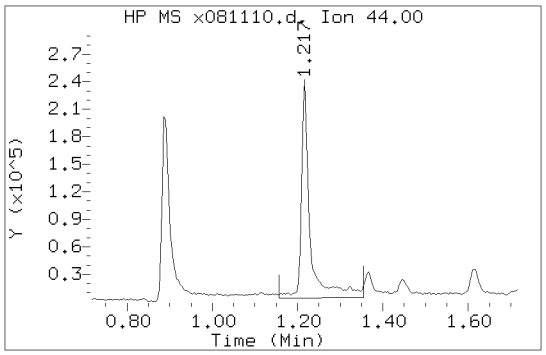
Acetaldehyde (75-07-0)

Reason Code:

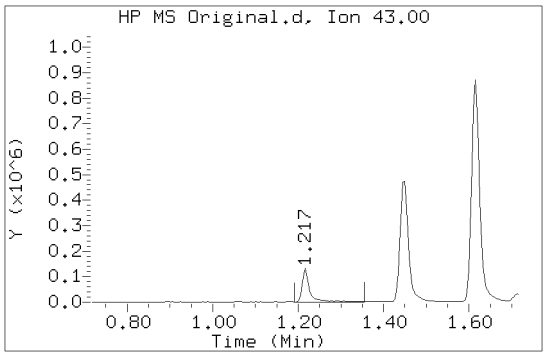
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12-Aug-2023
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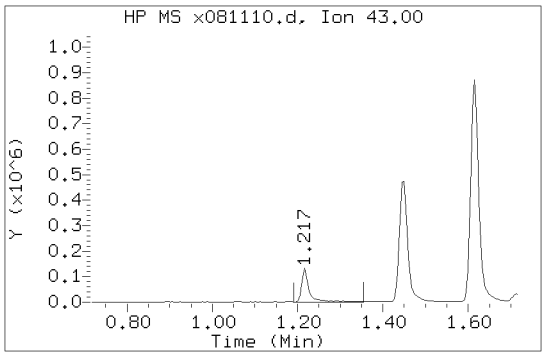
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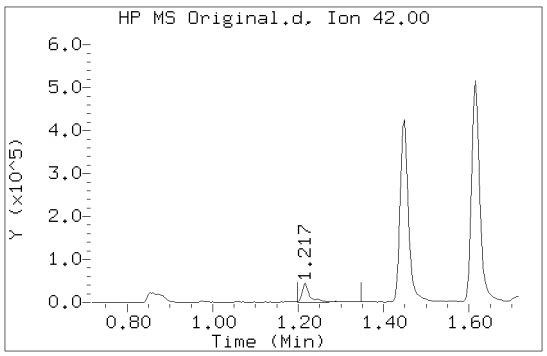
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12-Aug-2023
22:49



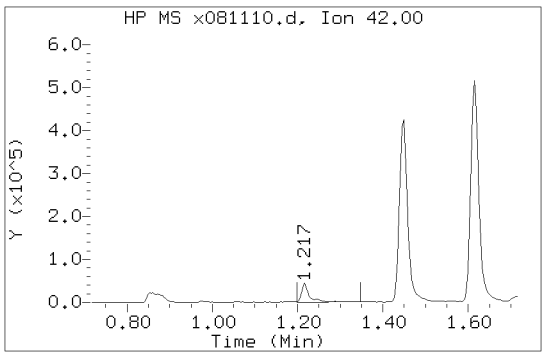
AFTER
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43
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12-Aug-2023
22:49



BEFORE
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AREA
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12-Aug-2023
22:49



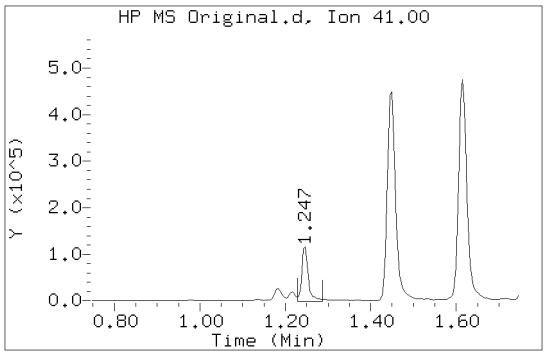
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12-Aug-2023
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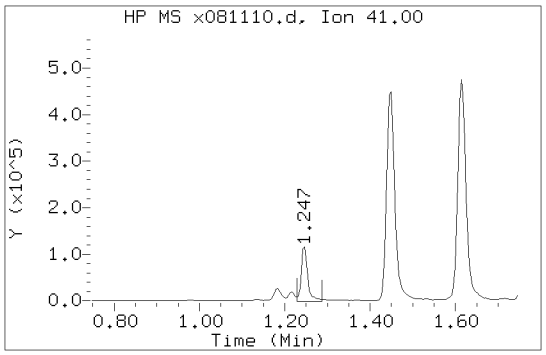
Isobutylene (115-11-7)

Reason Code:

BEFORE
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AFTER
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12-Aug-2023
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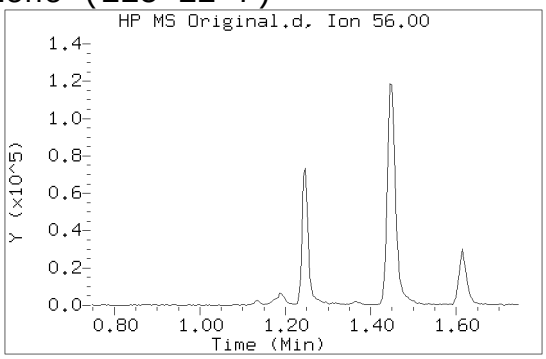


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Inj Date : 11-AUG-2023 14:37
InstruID : voa6.i
LabSampID : VSTD150

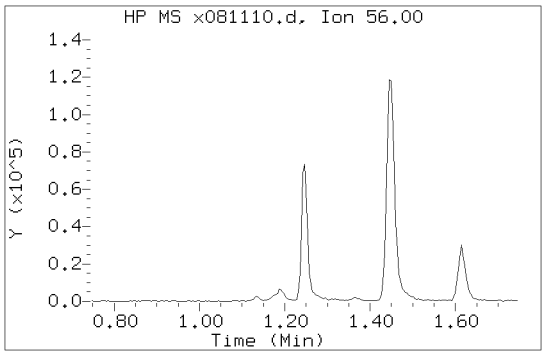
Isobutylene (115-11-7)

Reason Code:

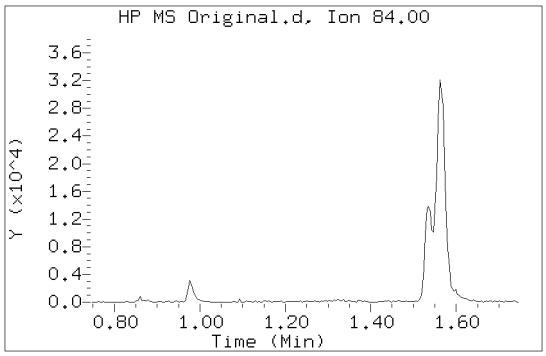
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12-Aug-2023
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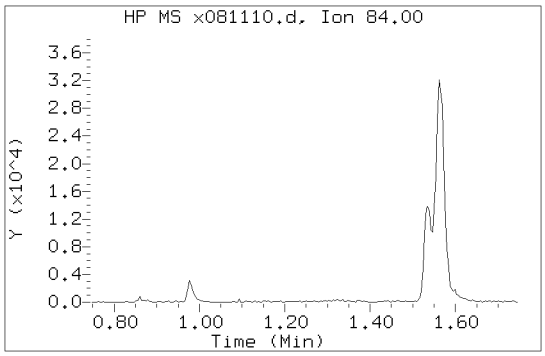
AFTER
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12-Aug-2023
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BEFORE
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12-Aug-2023
22:49



AFTER
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84
AREA
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HEIGHT
0
12-Aug-2023
22:49



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081111.D Page 1
Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081111.D
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Inj Date : 11-AUG-2023 14:57
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 14:37 Cal File: X081110.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	697355	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	359997	4000.00	4061.37(A)
140 1,3-Butadiene	54	1.167	1.167	(0.279)	1392141	200.000	193.77
25 Methacrylonitrile	41	3.821	3.821	(0.914)	1395789	200.000	200.68(A)
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	4536512	4000.00	4150.09(A)
13 Acetonitrile	39	2.202	2.202	(0.527)	2017237	2000.00	1875.70
14 Allyl Chloride	41	2.202	2.202	(0.527)	3835902	200.000	180.55
4 Propionitrile	54	3.664	3.664	(0.876)	2016279	2000.00	2076.17(A)
136 n-Hexane	57	2.772	2.772	(0.663)	1640105	200.000	90.44
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	586400	200.000	215.61(AH)
194 Acetaldehyde	44	1.216	1.216	(0.291)	422211	800.000	617.62(M)
23 Chloroprene	53	1.771	1.771	(0.424)	558535	200.000	189.32
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	2962283	200.000	208.36(A)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	3243147	200.000	228.36(A)
139 Diethyl ether	59	1.760	1.760	(0.421)	1116371	200.000	181.37
130 Ethyl Acetate	43	3.664	3.664	(0.876)	1528506	200.000	190.95
40 Methyl Methacrylate	41	5.606	5.606	(1.341)	1323466	200.000	206.26(A)
49 Ethyl Methacrylate	69	6.786	6.786	(1.367)	2101737	200.000	211.02(AH)
132 n-Butanol	56	5.265	5.265	(1.259)	804319	4000.00	4131.68(AM)
142 Tetrahydrofuran	42	3.851	3.851	(0.921)	514614	400.000	378.29

150	Allyl alcohol	57	2.772	2.772 (0.663)	1640105	4000.00	1820.96
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	6210977	200.000	200.20(A)

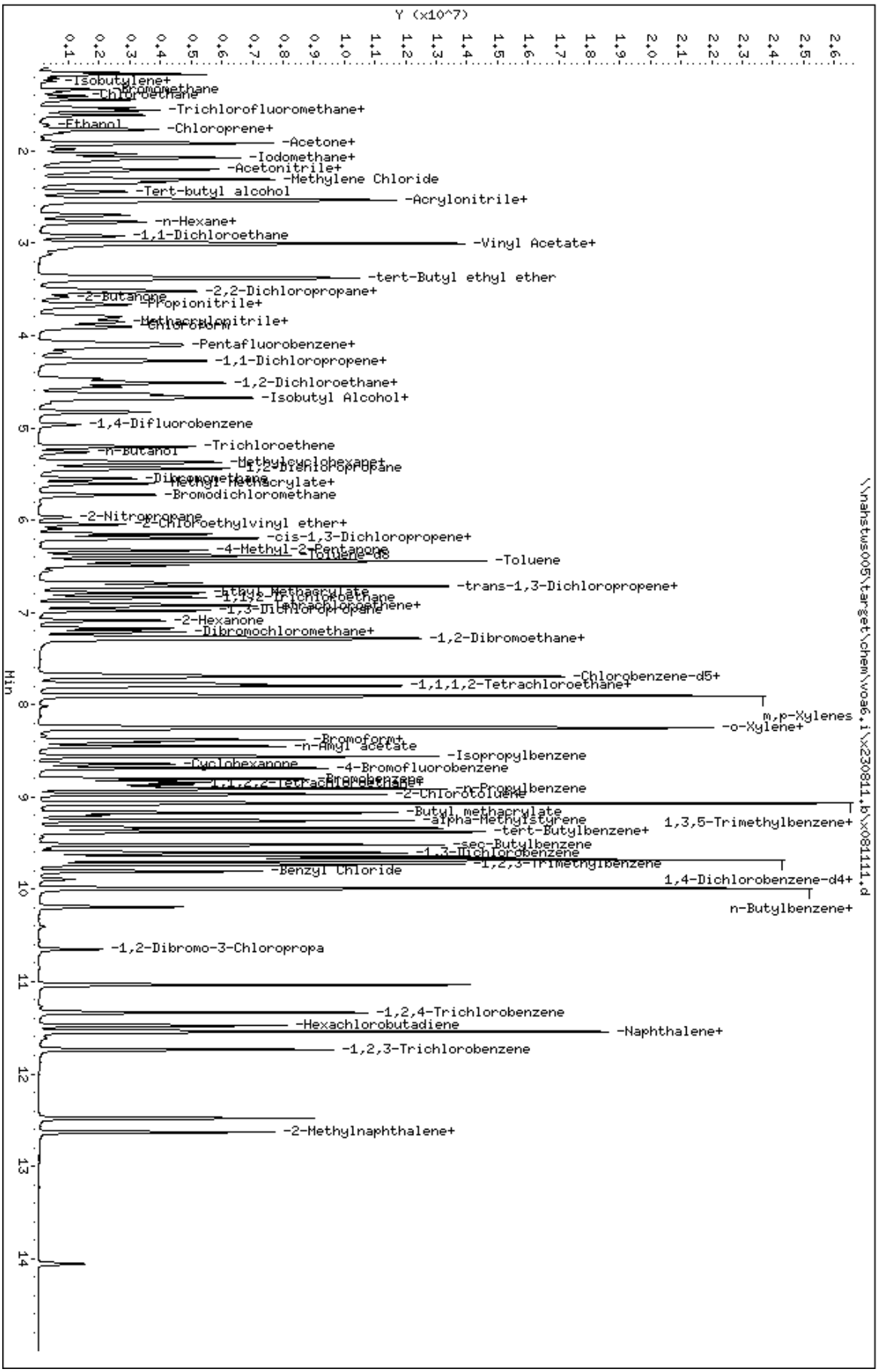
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	131 Methyl Acrylate	55	3.690	3.690	(0.883)	1475964	200.000	214.23(AM)
	162 Butyl acrylate	55	8.248	8.248	(1.076)	3963766	200.000	225.60(A)
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1273733	200.000	197.23
	3 Chloromethane	50	1.085	1.085	(0.260)	1501670	200.000	221.29(A)
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	1625625	200.000	194.35
	6 Bromomethane	94	1.336	1.336	(0.320)	956388	200.000	212.41(A)
	7 Chloroethane	64	1.403	1.403	(0.336)	978448	200.000	178.47
	8 Trichlorofluoromethane	101	1.561	1.561	(0.373)	2287228	200.000	192.13
	9 Acrolein	56	1.861	1.861	(0.445)	87268	400.000	389.50(M)
	10 Acetone	43	1.977	1.977	(0.473)	1042142	400.000	399.64
	11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	1251936	200.000	185.92
	15 Iodomethane	142	2.029	2.029	(0.485)	3724033	400.000	398.58
	16 Acrylonitrile	53	2.536	2.536	(0.606)	1202275	400.000	370.63
	17 Methylene Chloride	84	2.307	2.307	(0.552)	1425676	200.000	168.83
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.607)	4430970	200.000	184.47
	19 Carbon Disulfide	76	2.074	2.074	(0.496)	7789426	400.000	389.78
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	1432064	200.000	183.01
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	9226020	400.000	398.58
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	2596693	200.000	176.20
	24 2-Butanone	43	3.585	3.585	(0.857)	1142340	400.000	442.53(AH)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	1951668	200.000	197.32
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	1468934	200.000	195.47
	28 Chloroform	83	3.904	3.904	(0.934)	2441223	200.000	189.00
	29 Bromochloromethane	128	3.795	3.795	(0.908)	772992	200.000	180.94
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	1262400	200.000	199.84
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	2104490	200.000	202.94(A)
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1801498	200.000	210.60(AH)
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	1992723	200.000	192.82
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	1835945	200.000	203.31(AH)
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	1400428	200.000	199.86
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1087107	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	5273785	200.000	196.95
	38 Trichloroethene	130	5.205	5.205	(1.048)	1543357	200.000	200.55(A)
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	1962606	200.000	196.80
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	1056330	400.000	414.05(A)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	1494470	200.000	197.93
	44 Dibromomethane	93	5.549	5.549	(1.118)	976857	200.000	189.32
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	3137692	400.000	405.52(A)
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	2420159	200.000	212.08(A)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	1078660	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	4669605	200.000	183.94
	50 Toluene	91	6.445	6.445	(0.841)	5994422	200.000	199.44
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	2078683	200.000	217.04(A)
	52 2-Hexanone	43	7.086	7.086	(0.924)	2163687	400.000	416.59(A)
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	1182722	200.000	197.40
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	2389306	200.000	195.08
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	1803342	200.000	208.55(A)
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	1301957	200.000	208.40(A)
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	1466476	200.000	200.36(A)
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	1360685	200.000	216.33(A)
	59 Chlorobenzene	112	7.690	7.690	(1.003)	4161283	200.000	200.93(A)
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	1662627	200.000	207.83(A)

61 Ethylbenzene	106	7.799	7.799 (1.017)	2073572	200.000	202.74(A)
62 m,p-Xylenes	106	7.904	7.904 (1.031)	5408322	400.000	413.37(A)

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	63	o-Xylene	106	8.241	8.241	(1.075)	2648551	200.000	205.42(A)
	64	Styrene	104	8.256	8.256	(1.077)	4660554	200.000	217.37(A)
	66	Bromoform	173	8.406	8.406	(1.096)	1355440	200.000	232.33(A)
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	6772619	200.000	211.38(A)
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	2090395	200.000	192.13
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	2160189	200.000	202.02(A)
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	668386	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1487796	200.000	185.94(M)
	73	n-Propylbenzene	91	8.912	8.912	(0.922)	8136250	200.000	205.87(A)
	74	Bromobenzene	156	8.803	8.803	(0.911)	2064664	200.000	193.26
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	6150520	200.000	212.88(A)
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	4820721	200.000	190.49
	77	4-Chlorotoluene	91	9.066	9.066	(0.938)	5936857	200.000	203.88(A)
	78	tert-Butylbenzene	119	9.336	9.336	(0.966)	5131888	200.000	207.33(A)
	79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	6083993	200.000	204.49(A)
	81	sec-Butylbenzene	105	9.519	9.519	(0.985)	7245513	200.000	213.53(A)
	82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	6561798	200.000	213.87(A)
	83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	3814202	200.000	200.47(A)
	84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	4054602	200.000	198.98
	86	Benzyl Chloride	91	9.804	9.804	(1.279)	3968483	200.000	257.03(A)
	87	n-Butylbenzene	91	9.992	9.992	(1.034)	6046266	200.000	196.26
	88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	3878524	200.000	201.94(A)
	89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	382647	200.000	207.95(A)
	90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	2749171	200.000	216.31(A)
	91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	1270952	200.000	81.27
	92	Naphthalene	128	11.540	11.540	(1.194)	6417842	200.000	202.31(A)
	93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	2508449	200.000	202.54(A)
M	94	1,2-Dichloroethylene (total)	96				2900998	400.000	
M	95	Xylenes (total)	106				8056873	600.000	
	141	Cyclohexane	56	4.121	4.121	(0.986)	1872161	200.000	195.12(A)
	138	Freon TF	101	1.917	1.917	(0.459)	1294079	200.000	193.81
	147	Methylcyclohexane	55	5.381	5.381	(1.084)	3637612	200.000	222.73(A)
	146	Methyl Acetate	43	2.232	2.232	(0.534)	1140139	200.000	181.94
	148	Tert-Butyl alcohol	59	2.442	2.442	(0.584)	3353385	4000.00	4027.81(A)
	149	Isopropyl Alcohol	45	2.104	2.104	(0.503)	1951400	4000.00	4024.91(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081111.d
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Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

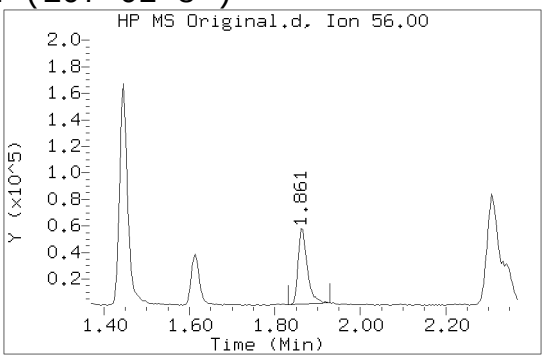
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 11-AUG-2023 14:57
InstruID : voa6.i
LabSampID : VSTD200

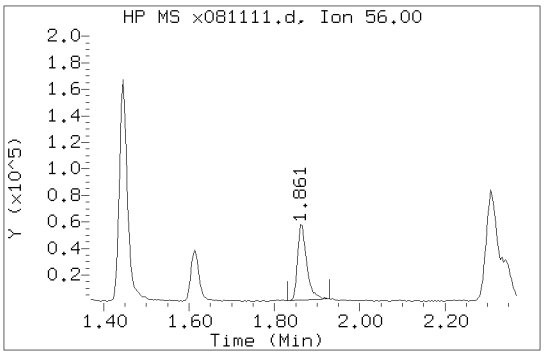
Acrolein (107-02-8)

Reason Code:

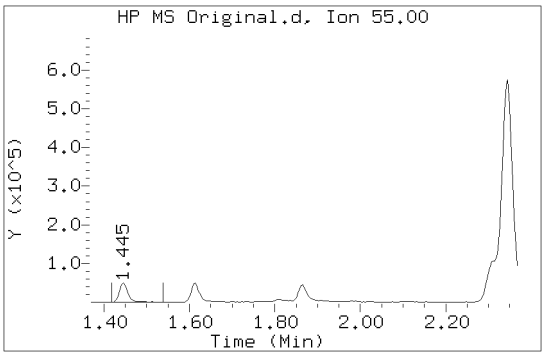
BEFORE
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HEIGHT
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12-Aug-2023
22:49



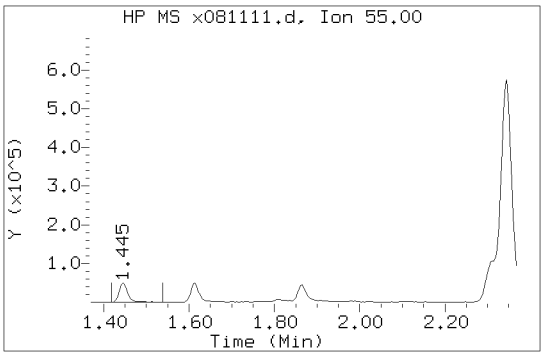
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BEFORE
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12-Aug-2023
22:49



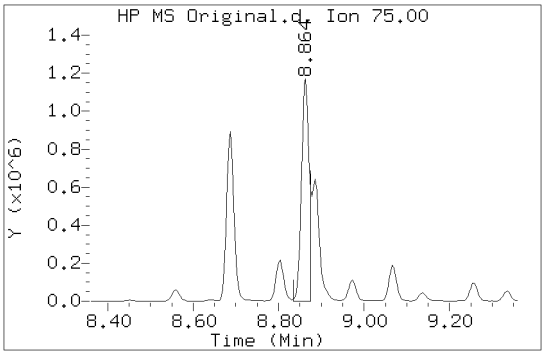
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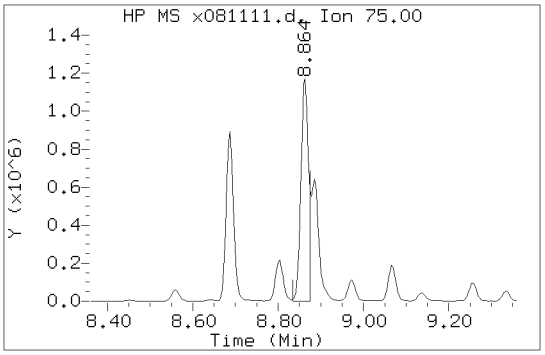
1,2,3-Trichloropropane (96-18-4)

Reason Code:

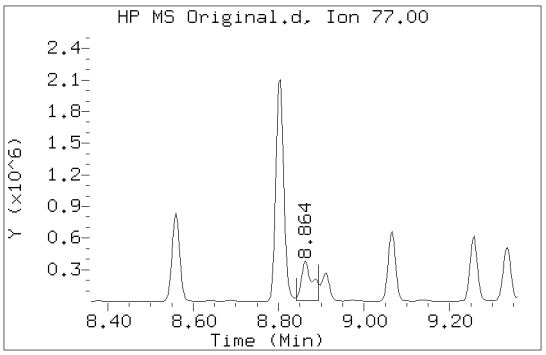
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22:49



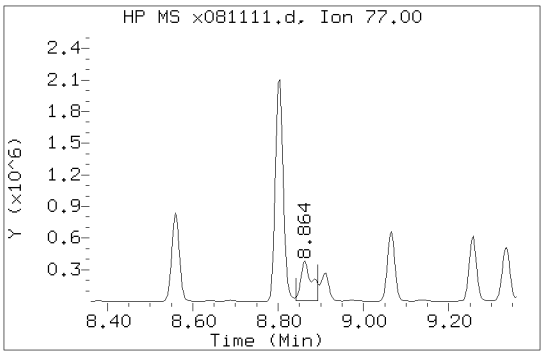
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1168555
12-Aug-2023
22:49



BEFORE
MASS
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HEIGHT
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12-Aug-2023
22:49



AFTER
MASS
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HEIGHT
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12-Aug-2023
22:49

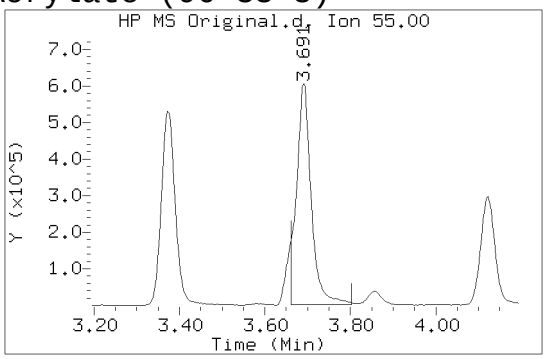


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LabSampID : VSTD200

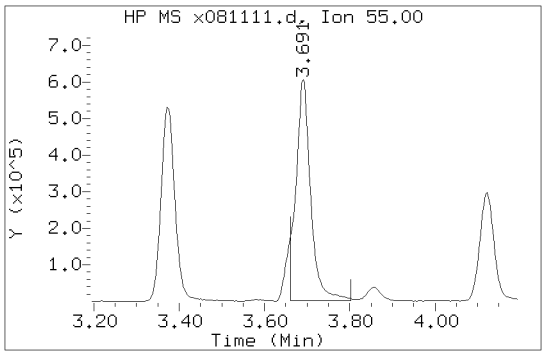
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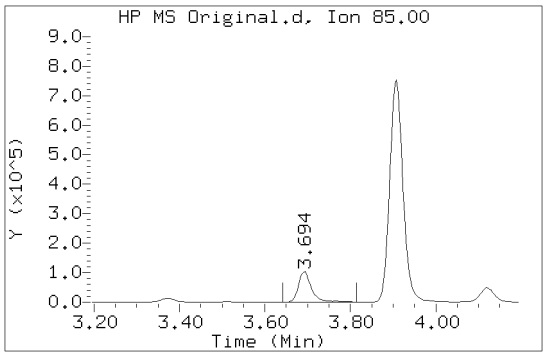
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12-Aug-2023
22:49



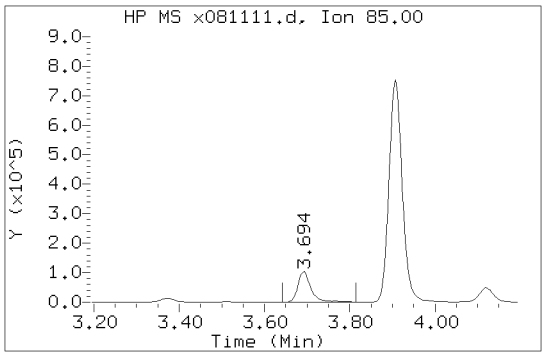
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BEFORE
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12-Aug-2023
22:49



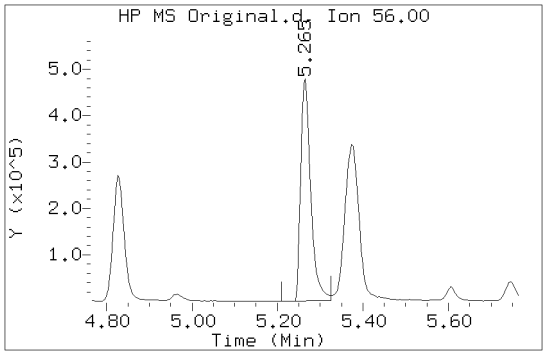
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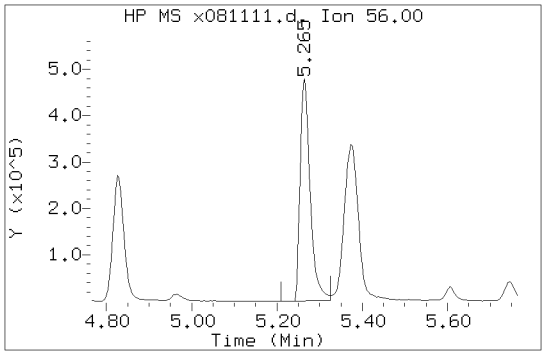
n-Butanol (71-36-3)

Reason Code:

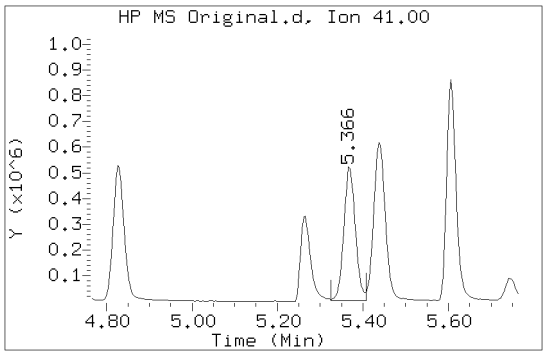
BEFORE
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12-Aug-2023
22:49



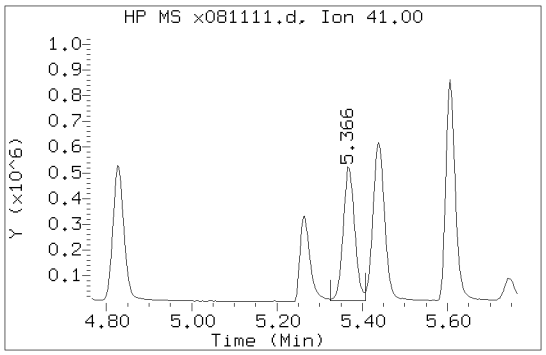
AFTER
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22:49



BEFORE
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12-Aug-2023
22:49



AFTER
MASS
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977826
HEIGHT
520244
12-Aug-2023
22:49



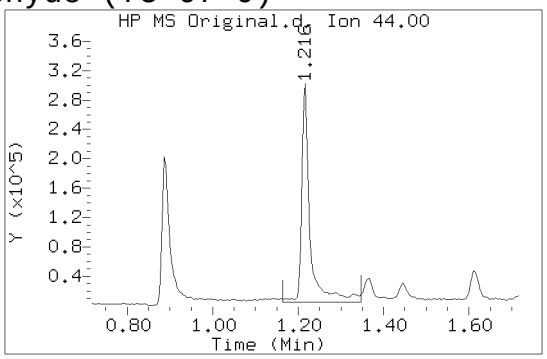
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Inj Date : 11-AUG-2023 14:57
InstruID : voa6.i
LabSampID : VSTD200

Acetaldehyde (75-07-0)

Reason Code:

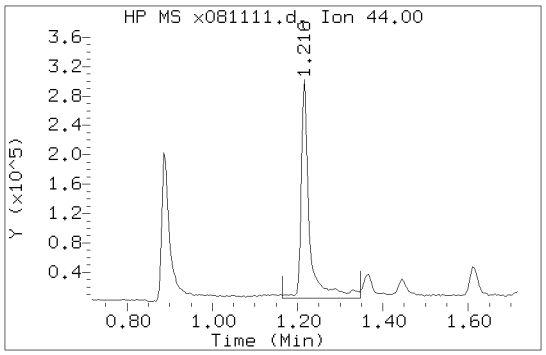
BEFORE

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12-Aug-2023
22:49



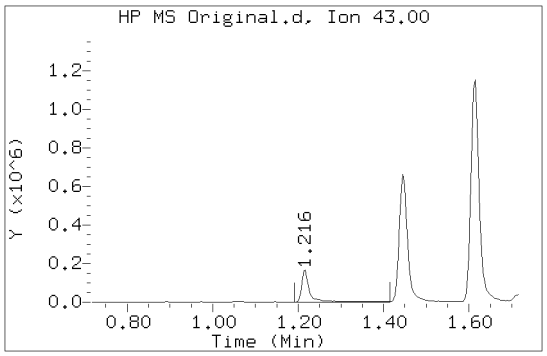
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12-Aug-2023
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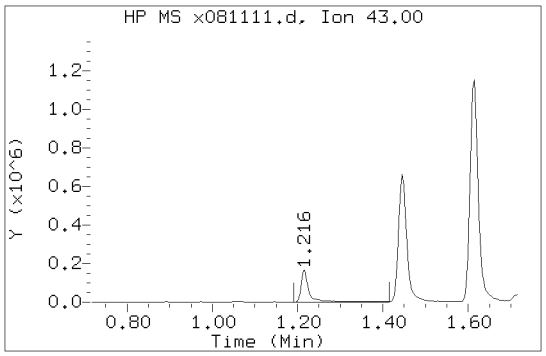
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12-Aug-2023
22:49



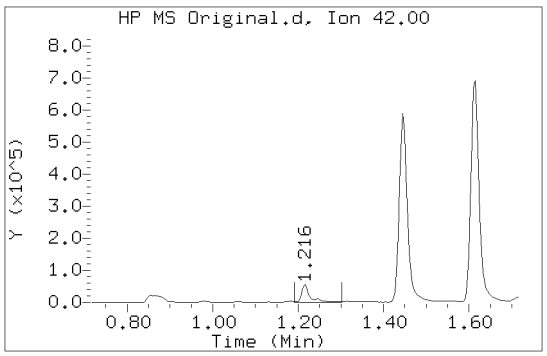
AFTER

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12-Aug-2023
22:49



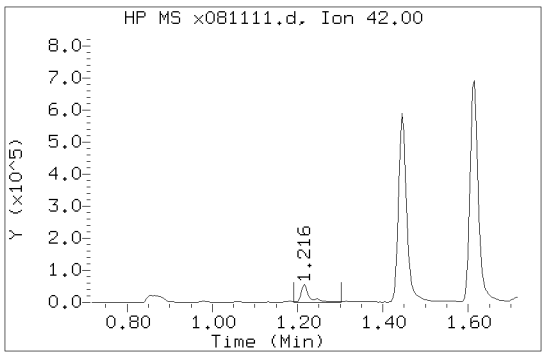
BEFORE

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12-Aug-2023
22:49



AFTER

MASS
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AREA
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HEIGHT
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12-Aug-2023
22:49

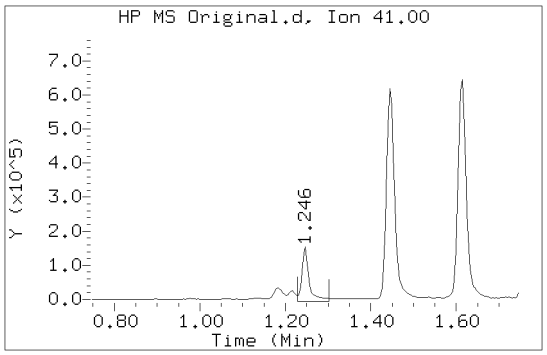


Isobutylene (115-11-7)

Reason Code:

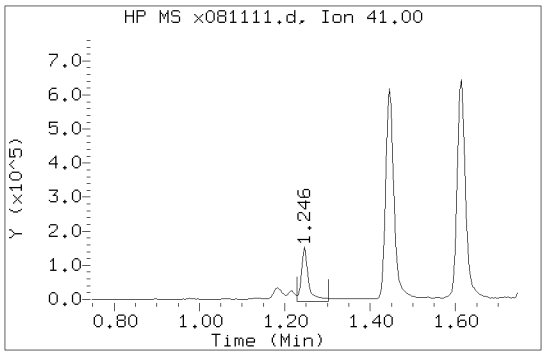
BEFORE

MASS
41
AREA
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12-Aug-2023
22:49



AFTER

MASS
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HEIGHT
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12-Aug-2023
22:49

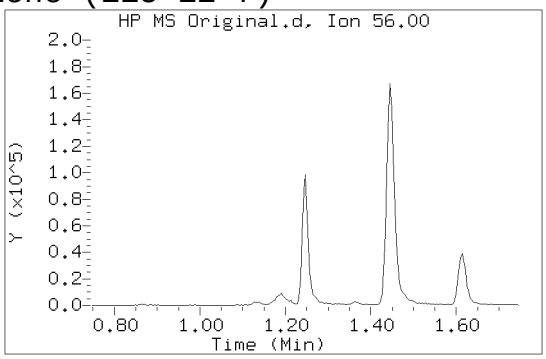


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Inj Date : 11-AUG-2023 14:57
InstruID : voa6.i
LabSampID : VSTD200

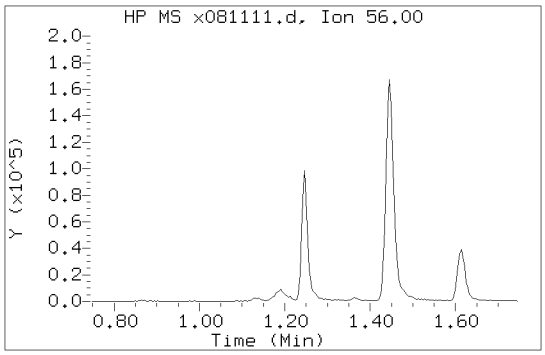
Isobutylene (115-11-7)

Reason Code:

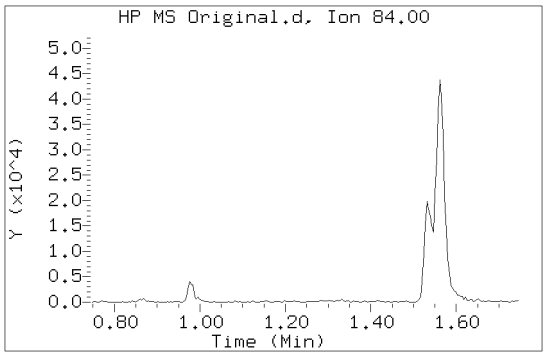
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12-Aug-2023
22:49



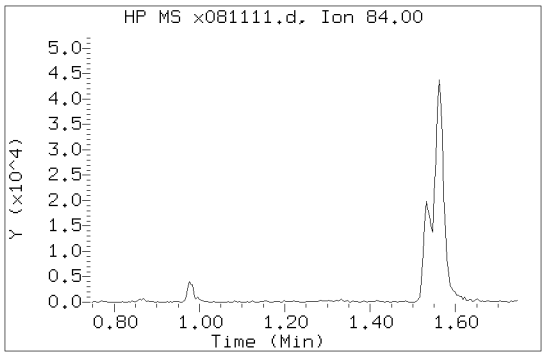
AFTER
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BEFORE
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22:49



AFTER
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AREA
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HEIGHT
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12-Aug-2023
22:49



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081113.D Page 1
Report Date: 14-Aug-2023 16:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081113.D
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Inj Date : 11-AUG-2023 15:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 14-Aug-2023 16:51 voa6.i Quant Type: ISTD
Cal Date : 11-AUG-2023 14:57 Cal File: X081111.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V6.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.181	(1.000)	670199	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.341)	82861	972.689	972.68
140 1,3-Butadiene	54	1.171	1.167	(0.280)	304586	44.1130	44.11
25 Methacrylonitrile	41	3.825	3.821	(0.916)	302256	45.2200	45.21
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	996165	948.239	948.23
13 Acetonitrile	39	2.202	2.202	(0.527)	422605	408.877	408.87
14 Allyl Chloride	41	2.202	2.202	(0.527)	853074	41.7819	41.78
4 Propionitrile	54	3.660	3.664	(0.876)	460651	493.555	493.55
136 n-Hexane	57	2.772	2.772	(0.664)	305876	48.8226	48.82
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	115652	46.2513	46.25
194 Acetaldehyde	44	1.216	1.216	(0.291)	117693	173.012	173.01
23 Chloroprene	53	1.775	1.771	(0.425)	125449	44.2468	44.24(M)
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	588589	47.9630	47.96
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	615675	47.1510	47.15
139 Diethyl ether	59	1.763	1.760	(0.422)	263563	44.5563	44.55
130 Ethyl Acetate	43	3.664	3.664	(0.877)	367968	47.8328	47.83
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	274347	44.4909	44.49
49 Ethyl Methacrylate	69	6.787	6.786	(1.367)	431949	45.3832	45.38
132 n-Butanol	56	5.373	5.265	(1.286)	145482	832.733	832.73
142 Tetrahydrofuran	42	3.851	3.851	(0.922)	114638	87.6858	87.68

150	Allyl alcohol	57	2.772	2.772 (0.664)	305876	975.699	975.69
166	1,2,3-Trimethylbenzene	105	9.729	9.729 (1.007)	1086956	40.5887	40.58

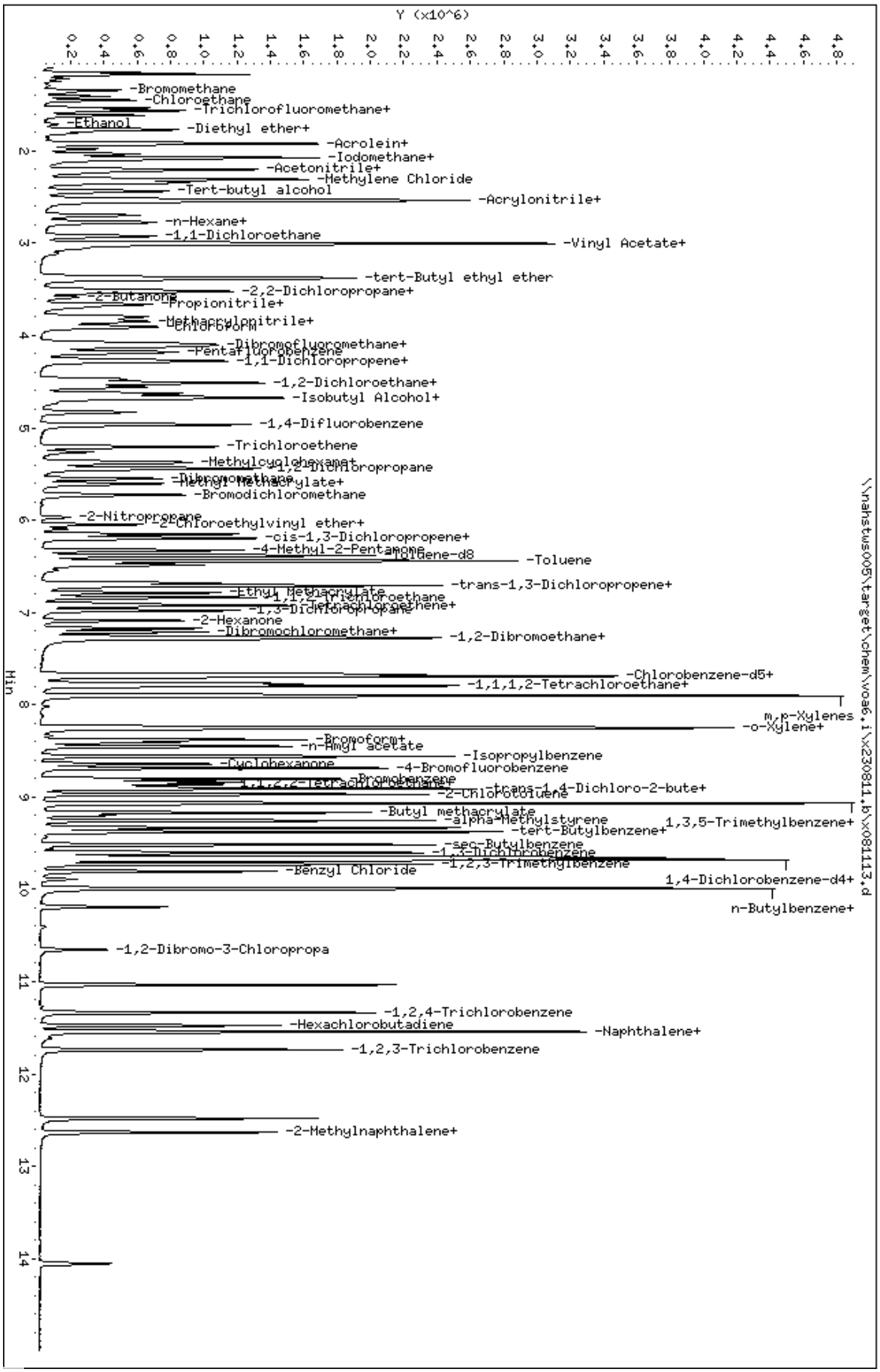
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	131 Methyl Acrylate	55	3.694	3.690	(0.884)	349204	52.7407	52.74
	162 Butyl acrylate	55	8.249	8.248	(1.076)	726261	44.9587	44.95
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	278753	45.4301	45.43
	3 Chloromethane	50	1.085	1.085	(0.260)	305198	46.7975	46.79
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	367708	45.7424	45.74
	6 Bromomethane	94	1.344	1.336	(0.322)	212672	49.1484	49.14
	7 Chloroethane	64	1.407	1.403	(0.337)	232390	44.1073	44.10
	8 Trichlorofluoromethane	101	1.565	1.561	(0.375)	497926	43.5217	43.52
	9 Acrolein	56	1.865	1.861	(0.446)	20861	94.8205	94.82
	10 Acetone	43	1.977	1.977	(0.473)	288065	111.670	111.66
	11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	290262	44.8534	44.85
	15 Iodomethane	142	2.033	2.029	(0.487)	637436	84.9734	84.97
	16 Acrylonitrile	53	2.539	2.536	(0.608)	279919	89.7905	89.79
	17 Methylene Chloride	84	2.307	2.307	(0.552)	359630	44.3140	44.31
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	1009461	43.7308	43.73
	19 Carbon Disulfide	76	2.075	2.074	(0.497)	1749941	91.1156	91.11
	20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	333755	44.3805	44.38
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	2143043	96.3367	96.33
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	631943	44.6198	44.61
	24 2-Butanone	43	3.585	3.585	(0.858)	263108	106.057	106.05(H)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	453259	47.6714	47.67
	27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.845)	337589	46.7448	46.74
	28 Chloroform	83	3.908	3.904	(0.935)	572759	46.1412	46.14
	29 Bromochloromethane	128	3.799	3.795	(0.909)	191270	46.5882	46.58
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	317829	51.7361	51.73
	31 1,1,1-Trichloroethane	97	4.084	4.080	(0.978)	454034	45.5581	45.55
	32 1,1-Dichloropropene	75	4.283	4.279	(0.863)	378396	46.2898	46.28
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	470160	47.6071	47.60
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	385124	44.6289	44.62
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	349319	51.0514	51.05
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1038890	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	1209828	47.2791	47.27
	38 Trichloroethene	130	5.205	5.205	(1.048)	341170	46.3912	46.39
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	453741	47.6112	47.61
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	237859	97.5610	97.56
	42 1,2-Dichloropropane	63	5.433	5.437	(1.094)	338551	46.9214	46.92
	44 Dibromomethane	93	5.550	5.549	(1.118)	230609	46.7682	46.76
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	699243	98.2915	98.29
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	529681	48.5712	48.57
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	991755	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1139657	48.8285	48.82
	50 Toluene	91	6.445	6.445	(0.841)	1287784	46.6006	46.60
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	449888	49.1542	49.15
	52 2-Hexanone	43	7.086	7.086	(0.924)	478972	100.302	100.30
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	269912	48.9988	48.99
	54 1,3-Dichloropropane	76	6.978	6.981	(0.910)	538369	47.8092	47.80
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	398140	50.0801	50.08
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	266778	46.4464	46.44
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	329212	48.9227	48.92
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	263671	43.8660	43.86
	59 Chlorobenzene	112	7.690	7.690	(1.003)	892241	46.8578	46.85
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	360717	49.0419	49.04

61 Ethylbenzene	106	7.795	7.799 (1.017)	439106	46.6953	46.69
62 m,p-Xylenes	106	7.900	7.904 (1.030)	1129037	93.8572	93.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	63 o-Xylene	106	8.237	8.241	(1.074)	553055	46.6550	46.65
	64 Styrene	104	8.256	8.256	(1.077)	982231	49.8271	49.82
	66 Bromoform	173	8.406	8.406	(1.096)	280929	52.3726	52.37
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1332646	45.2392	45.23
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	451137	48.0360	48.03
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	495886	50.6494	50.64
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	576953	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	349366	50.5840	50.58(M)
	73 n-Propylbenzene	91	8.908	8.912	(0.922)	1599561	46.8897	46.88
	74 Bromobenzene	156	8.803	8.803	(0.912)	440731	47.7939	47.79
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	1135547	45.5338	45.53
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	994141	45.5092	45.50
	77 4-Chlorotoluene	91	9.066	9.066	(0.939)	1180248	46.9553	46.95
	78 tert-Butylbenzene	119	9.332	9.336	(0.966)	958710	44.8714	44.87
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1174441	45.7319	45.73
	81 sec-Butylbenzene	105	9.516	9.519	(0.985)	1336529	45.6309	45.63
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	1195711	45.1498	45.14
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	777074	47.3148	47.31
	84 1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	817903	46.5010	46.50
	86 Benzyl Chloride	91	9.804	9.804	(1.279)	798143	56.2246	56.22
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	1066931	41.7285	41.72
	88 1,2-Dichlorobenzene	146	9.992	9.988	(1.035)	774373	46.7102	46.71
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.651	(1.103)	78707	49.5541	49.55
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	519071	47.3153	47.31
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	230823	55.7491	55.74
	92 Naphthalene	128	11.540	11.540	(1.195)	1286817	46.9944	46.99
	93 1,2,3-Trichlorobenzene	180	11.739	11.738	(1.215)	494650	46.2694	46.26
M	94 1,2-Dichloroethylene (total)	96				671344	91.1253	91.12
M	95 Xylenes (total)	106				1682092	140.512	140.51
	141 Cyclohexane	56	4.121	4.121	(0.987)	376528	42.2842	42.28
	138 Freon TF	101	1.921	1.917	(0.460)	272533	43.3566	43.35
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	673650	43.1633	43.16
	146 Methyl Acetate	43	2.236	2.232	(0.535)	286746	47.6134	47.61
	148 Tert-Butyl alcohol	59	2.438	2.442	(0.584)	814992	1008.88	1008.88
	149 Isopropyl Alcohol	45	2.101	2.104	(0.503)	473296	1006.13	1006.12

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081113.d
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Client ID: CCV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

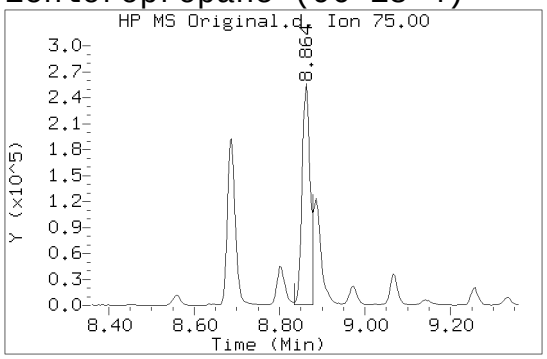
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

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Inj Date : 11-AUG-2023 15:38
InstruID : voa6.i
LabSampID : CCV

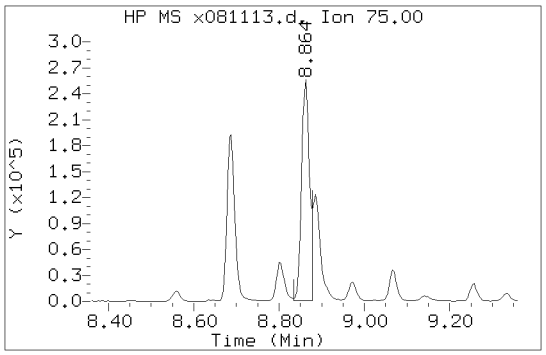
1,2,3-Trichloropropane (96-18-4)

Reason Code:

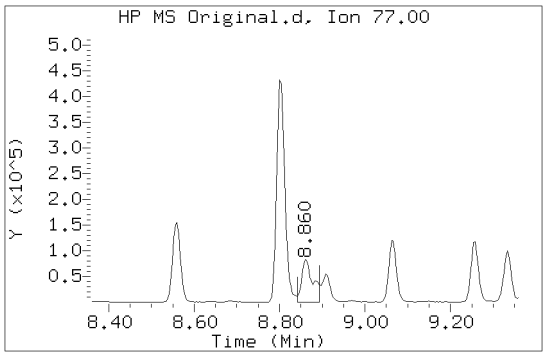
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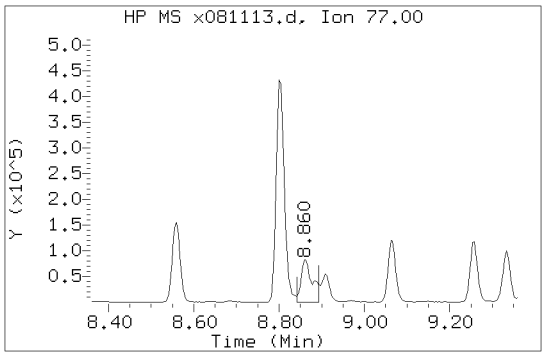
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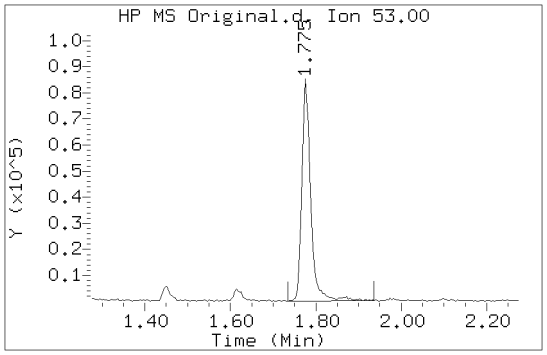
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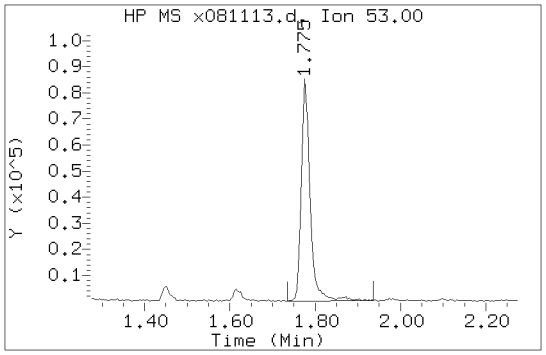
Chloroprene (126-99-8)

Reason Code:

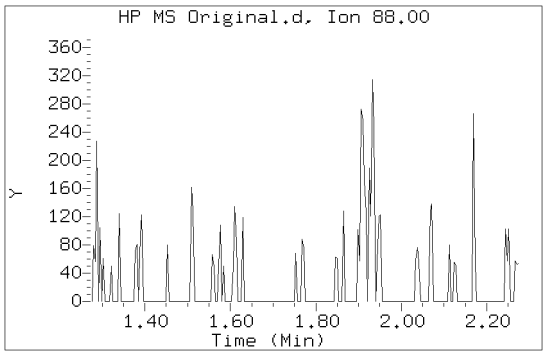
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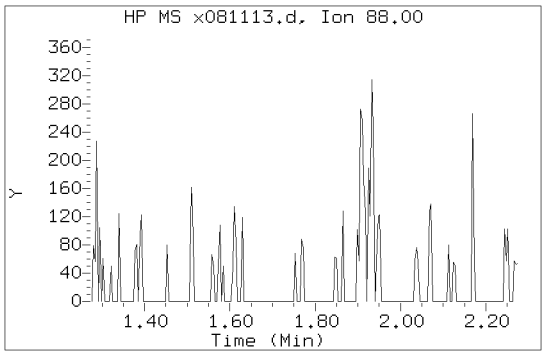
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BEFORE
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AFTER
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12-Aug-2023
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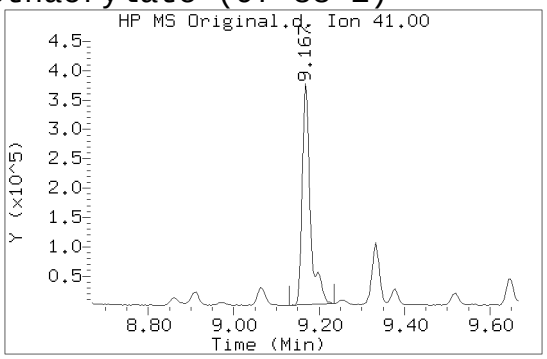


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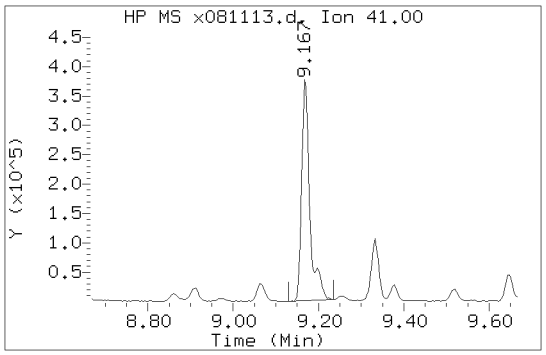
Butyl methacrylate (97-88-1)

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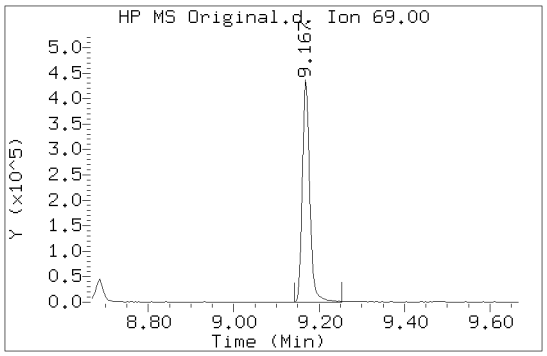
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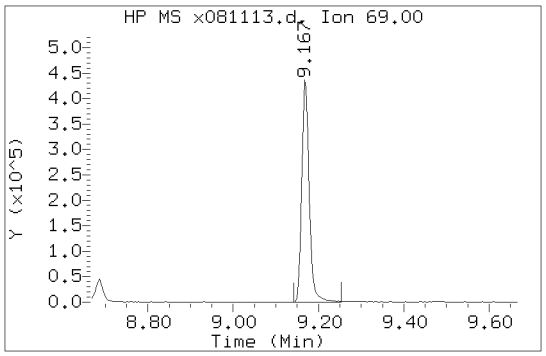
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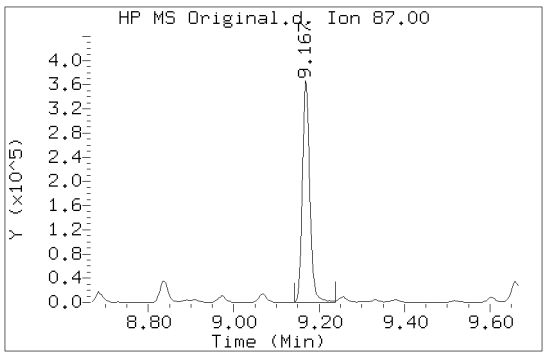
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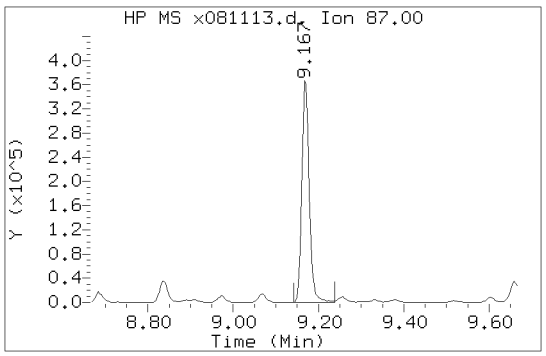
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BEFORE
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12-Aug-2023
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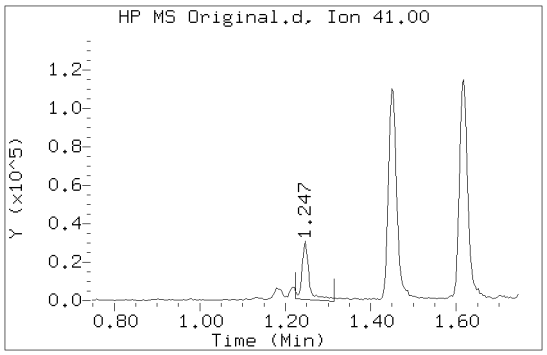
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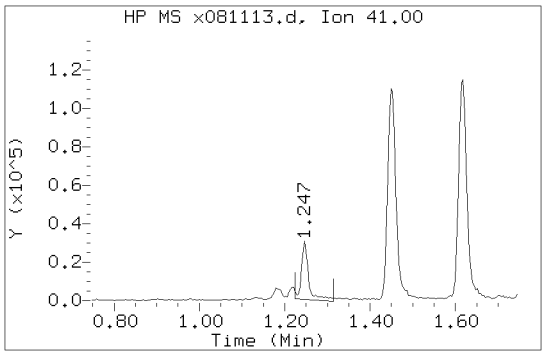
Isobutylene (115-11-7)

Reason Code:

BEFORE
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23:25



AFTER
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12-Aug-2023
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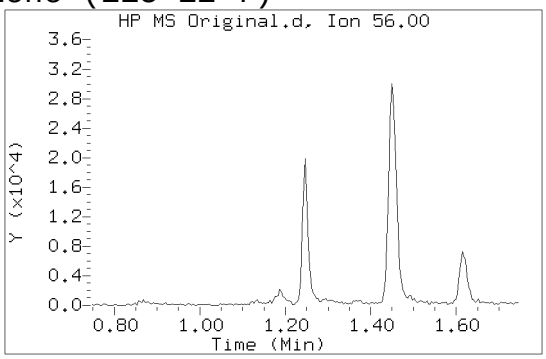


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InstruID : voa6.i
LabSampID : CCV

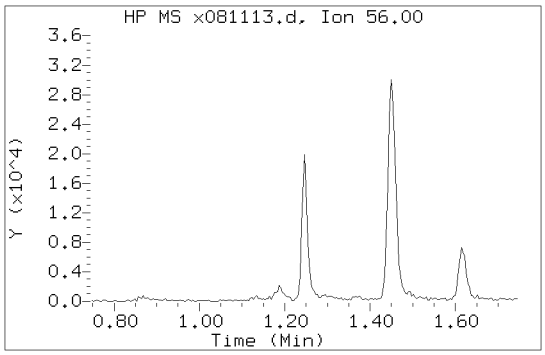
Isobutylene (115-11-7)

Reason Code:

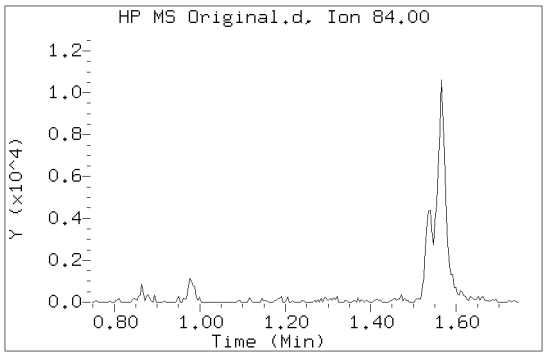
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12-Aug-2023
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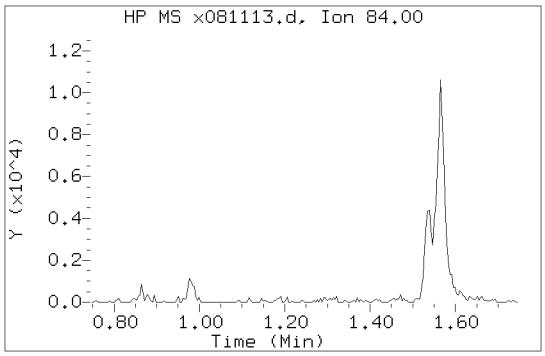
AFTER
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BEFORE
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23:25



AFTER
MASS
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12-Aug-2023
23:25



01249940

right solutions.
right partner.

Raw Data VOA6 443844

Volatiles by EPA 8260

Workorder

HS23080558

Client

Bhate Environmental Associates, Inc.

Project

Longhorn GW Treatment Plant Bi-Weekly Samples

08/14/2023

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

Phone (281) 530-5656 Fax (281) 530-5887

www.alsglobal.com

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 11-AUG-2023 11:13
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\bfb.m
Meth Date : 06-Feb-2018 12:19 pcabasca Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	133504			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	29288			15.00- 40.00	21.94
8.687	8.889	(0.000)	75	71592			30.00- 60.00	53.63
8.687	8.889	(0.000)	96	8909			5.00- 9.00	6.67
8.687	8.889	(0.000)	173	1436			0.00- 2.00	1.20
8.687	8.889	(0.000)	174	119896			50.00- 0.00	89.81
8.687	8.889	(0.000)	175	9940			5.00- 9.00	8.29
8.687	8.889	(0.000)	176	116688			95.00- 101.00	97.32
8.687	8.889	(0.000)	177	8151			5.00- 9.00	6.99

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.94
75	30.00 - 60.00% of mass 95	53.63
96	5.00 - 9.00% of mass 95	6.67
173	Less than 2.00% of mass 174	1.08 (1.20)
174	Greater than 50.00% of mass 95	89.81
175	5.00 - 9.00% of mass 174	7.45 (8.29)
176	95.00 - 101.00% of mass 174	87.40 (97.32)
177	5.00 - 9.00% of mass 176	6.11 (6.99)

Data File: X081101.D
Spectrum: Scan 2160 (8.68)
Location of Maximum: 95.00
Number of points: 111

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	1489	66.90	454	96.00	8909	139.70	97
37.00	9334	68.00	15426	97.10	317	140.90	1519
38.00	8002	69.00	16323	103.80	1007	141.70	221
39.00	2897	69.90	960	104.70	209	142.90	1486
40.00	2340	70.10	1008	105.90	671	143.70	56
40.90	128	70.90	129	106.80	182	145.70	208
43.10	411	71.80	501	109.90	155	147.70	275
44.00	3487	73.00	6125	111.00	302	148.90	79
45.00	1525	74.00	26376	111.70	142	149.80	173
46.00	235	75.00	71592	112.60	141	151.70	54
47.00	1767	76.00	6877	113.00	142	152.60	72
47.90	1117	77.00	1148	114.90	321	154.00	61
49.00	6205	78.00	937	115.60	465	154.80	330
50.00	29288	78.90	6479	116.10	489	156.90	430
51.10	8526	79.90	1839	116.80	1358	158.70	315
52.10	216	80.90	7153	117.70	508	160.90	203
55.10	453	81.90	1248	118.80	884	169.30	52
55.90	2727	82.80	135	123.90	264	170.20	191
57.00	4451	83.20	170	125.00	121	171.20	109
57.90	475	86.10	234	127.00	76	172.90	1436
60.00	1216	87.00	5967	127.80	678	173.90	119896
61.00	6884	87.90	5466	128.60	243	174.90	9940
62.00	7158	88.70	396	129.80	454	175.90	116688
63.00	6527	90.90	677	130.90	241	176.90	8151
63.80	288	91.90	4406	135.00	136	189.20	58
64.20	280	93.00	5676	136.90	208	277.90	56
65.00	63	94.00	15567	137.60	65	280.80	137
65.80	79	95.00	133504	138.80	118		

Data File: \\nahstws005\target\chem\voa6.i\x230811.b\x081101.d Page 1

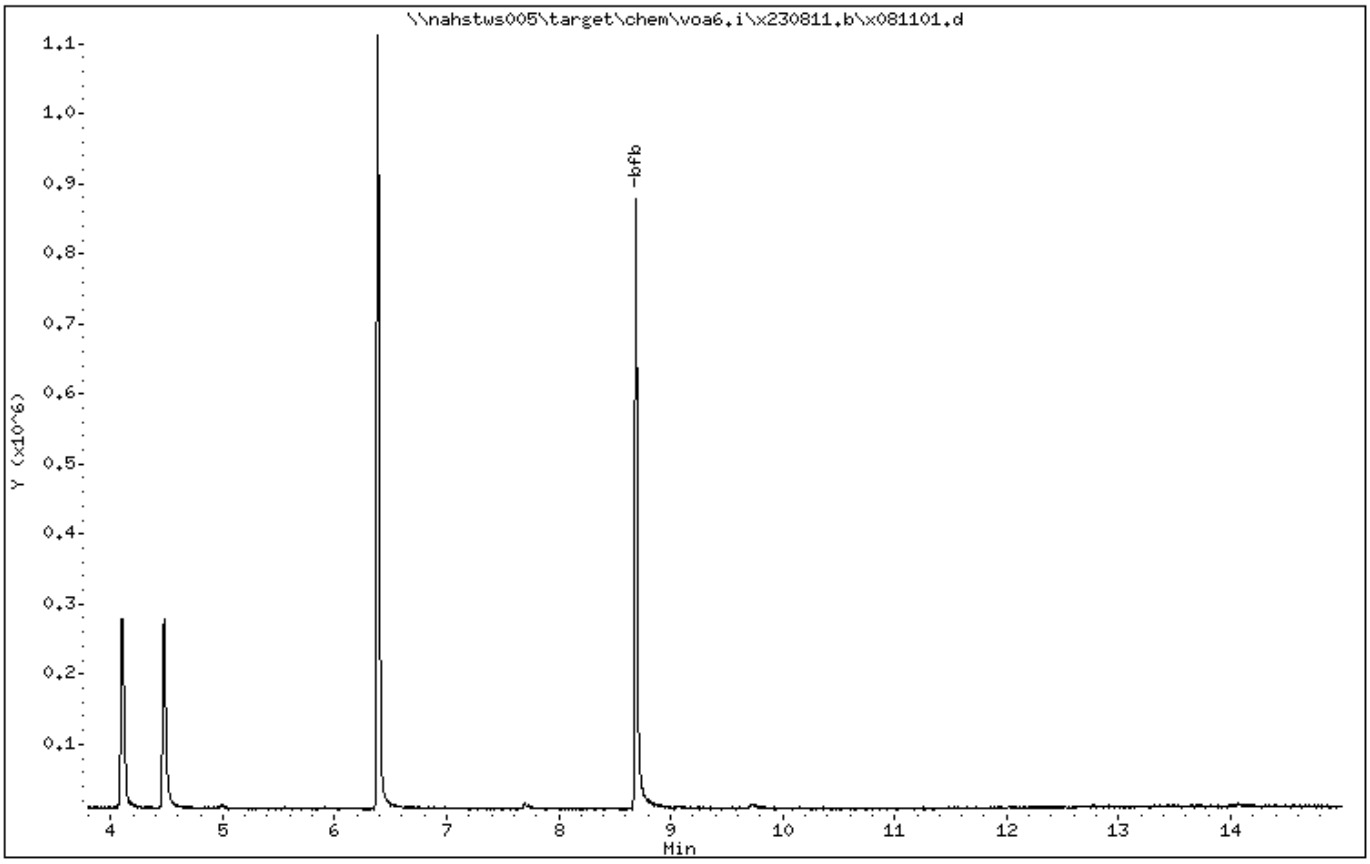
Date : 11-AUG-2023 11:13

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa6.i\x230811.b\x081101.d
Inj Date : 11-AUG-2023 11:13
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081116.D Page 1
Report Date: 12-Aug-2023 23:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230811.b\X081116.D
Lab Smp Id: VLCSW-230811 Client Smp ID: VLCSW-230811
Inj Date : 11-AUG-2023 16:39
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230811;VLCSW-230811;3;;LCS
Misc Info : V6;WATER;0;1;
Comment :
Method : \\nahstws005\Target\chem\voa6.i\X230811.b\8260W.m
Meth Date : 12-Aug-2023 23:09 pcabasca Quant Type: ISTD
Cal Date : 11-AUG-2023 13:56 Cal File: X081108.D
Als bottle: 17 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	615054	50.0000	
135 1,4-Dioxane	88	5.606	5.602	(1.341)	30403	388.894	388.89(a)
140 1,3-Butadiene	54	1.171	1.171	(0.280)	132071	20.8427	20.84
25 Methacrylonitrile	41	3.833	3.829	(0.917)	116039	18.9169	18.91
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	382010	396.234	396.23
13 Acetonitrile	39	2.202	2.202	(0.527)	173042	182.432	182.43
14 Allyl Chloride	41	2.202	2.202	(0.527)	338070	18.0426	18.04
4 Propionitrile	54	3.664	3.660	(0.876)	168990	197.295	197.29(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	43524	18.3717	18.37
194 Acetaldehyde	44	1.216	1.216	(0.291)	39414	57.6501	57.65
23 Chloroprene	53	1.775	1.775	(0.425)	54276	20.8599	20.85(M)
130 Ethyl Acetate	43	3.664	3.664	(0.876)	150911	21.3760	21.37
40 Methyl Methacrylate	41	5.610	5.606	(1.342)	104705	18.5024	18.50
49 Ethyl Methacrylate	69	6.787	6.787	(1.367)	169359	18.8505	18.85
131 Methyl Acrylate	55	3.702	3.694	(0.885)	115865	19.0682	19.06
132 n-Butanol	56	5.268	5.265	(1.260)	55409	385.321	385.32(a)
136 n-Hexane	57	2.772	2.772	(0.663)	158024	28.9118	28.91
139 Diethyl ether	59	1.763	1.763	(0.422)	101651	18.7252	18.72
142 Tetrahydrofuran	42	3.859	3.851	(0.923)	45338	37.7880	37.78
145 alpha-Methylstyrene	118	9.257	9.257	(0.958)	230674	20.3798	20.37
156 Diisopropyl ether	45	3.004	3.008	(0.719)	410087	18.5127	18.51

162	Butyl acrylate	55	8.252	8.249 (1.076)	278451	18.1936	18.19
167	Ethanol	45	1.707	1.707 (0.408)	32968	439.052	439.05

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	200	Dimethyl Disulfide	94	6.198	6.194	(0.808)	233847	18.9025	18.90
	182	Epichlorohydrin	57	6.101	6.097	(1.229)	41262	68.7988	68.79
	164	Dicyclopentadiene	66	9.681	9.681	(1.002)	483342	17.2130	17.21
	166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	409043	16.5603	16.56
	205	2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	179891	16.5479	16.54
	86	Benzyl Chloride	91	9.808	9.804	(1.279)	258928	19.2519	19.25
	134	Cyclohexanone	55	8.642	8.642	(0.894)	122126	360.385	360.38(a)
	202	Isobutylene	41	1.246	1.246	(0.298)	13572	16.8174	16.81(M)
	133	Ethyl Acrylate	55	5.388	5.381	(1.289)	256124	17.6047	17.60
	163	Butyl methacrylate	41	9.171	9.167	(0.949)	203906	18.9045	18.90
	188	Isopropyl acetate	43	4.680	4.680	(0.943)	382854	19.3285	19.32
	189	n-Butyl acetate	43	7.214	7.210	(0.941)	219649	20.3800	20.38
	2	Dichlorodifluoromethane	85	0.980	0.980	(0.234)	122830	22.1607	22.16
	3	Chloromethane	50	1.085	1.085	(0.260)	135942	22.7136	22.71
	5	Vinyl Chloride	62	1.149	1.149	(0.275)	155621	21.0947	21.09
	6	Bromomethane	94	1.344	1.344	(0.321)	88539	22.2959	22.29
	7	Chloroethane	64	1.407	1.407	(0.337)	98806	20.4346	20.43
	8	Trichlorofluoromethane	101	1.565	1.565	(0.374)	226260	21.5496	21.54
	9	Acrolein	56	1.865	1.868	(0.446)	7534	35.6507	35.65
	10	Acetone	43	1.981	1.977	(0.474)	108902	43.2980	43.29
	11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	119810	20.1738	20.17
	15	Iodomethane	142	2.033	2.033	(0.486)	218827	35.7441	35.74
	16	Acrylonitrile	53	2.539	2.539	(0.607)	112063	39.1698	39.16
	17	Methylene Chloride	84	2.307	2.307	(0.552)	150423	20.1972	20.19
	18	Methyl tert-butyl ether	73	2.539	2.539	(0.607)	394903	18.6414	18.64
	19	Carbon Disulfide	76	2.075	2.075	(0.496)	748104	42.4446	42.44
	20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	138495	20.0673	20.06
	21	Vinyl Acetate	43	3.004	3.000	(0.719)	812022	39.7758	39.77
	22	1,1-Dichloroethane	63	2.926	2.926	(0.700)	263518	20.2745	20.27
	24	2-Butanone	43	3.593	3.585	(0.859)	88975	39.0808	39.08
	26	2,2-Dichloropropane	77	3.514	3.510	(0.840)	187160	21.4401	21.44
	27	cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	138019	20.8245	20.82
	28	Chloroform	83	3.908	3.908	(0.935)	229355	20.1333	20.13
	29	Bromochloromethane	128	3.795	3.795	(0.908)	75202	19.9595	19.95
$	30	Dibromofluoromethane	113	4.103	4.099	(0.981)	295852	52.4885	52.48
	31	1,1,1-Trichloroethane	97	4.084	4.080	(0.977)	198353	21.6873	21.68
	32	1,1-Dichloropropene	75	4.283	4.283	(0.863)	164730	21.3483	21.34
	33	1,2-Dichloroethane	62	4.560	4.556	(0.918)	180807	19.3952	19.39
	34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	168935	20.7390	20.73
$	35	1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	335245	53.4383	53.43
*	36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	980658	50.0000	
	37	Benzene	78	4.511	4.511	(0.909)	486243	20.1303	20.13
	38	Trichloroethene	130	5.208	5.205	(1.049)	143750	20.7074	20.70
	39	Bromodichloromethane	83	5.726	5.726	(1.153)	177995	19.7861	19.78
	41	2-Chloroethylvinyl ether	63	6.052	6.048	(1.219)	85578	37.1853	37.18
	42	1,2-Dichloropropane	63	5.437	5.433	(1.095)	138481	20.3324	20.33
	44	Dibromomethane	93	5.553	5.550	(1.119)	90736	19.4942	19.49
	45	4-Methyl-2-Pentanone	43	6.329	6.326	(0.825)	264696	39.2721	39.27
	46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.240)	202117	19.6345	19.63
*	47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	939627	50.0000	
$	48	Toluene-d8	98	6.386	6.385	(0.833)	1054296	47.6772	47.67
	50	Toluene	91	6.446	6.445	(0.841)	520407	19.8765	19.87

51	trans-1,3-Dichloropropene	75	6.682	6.678 (1.346)	165729	19.1826	19.18
52	2-Hexanone	43	7.087	7.086 (0.924)	179355	39.6428	39.64

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	105148	20.1471	20.14
	54	1,3-Dichloropropane	76	6.982	6.982	(0.911)	206739	19.3777	19.37
	55	Dibromochloromethane	129	7.177	7.173	(0.936)	152103	20.1937	20.19
	56	Tetrachloroethene	164	6.925	6.925	(0.903)	115050	21.1416	21.14
	57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	128830	20.2069	20.20
	58	1-Chlorohexane	55	7.694	7.694	(1.550)	126793	22.3467	22.34
	59	Chlorobenzene	112	7.690	7.690	(1.003)	354433	19.6464	19.64
	60	1,1,1,2-Tetrachloroethane	131	7.773	7.769	(1.014)	139126	19.9645	19.96
	61	Ethylbenzene	106	7.799	7.795	(1.017)	183373	20.5820	20.58
	62	m,p-Xylenes	106	7.900	7.900	(1.030)	469799	41.2212	41.22
	63	o-Xylene	106	8.237	8.237	(1.074)	225097	20.0423	20.04
	64	Styrene	104	8.260	8.256	(1.077)	385242	20.6269	20.62
	66	Bromoform	173	8.406	8.406	(1.096)	100876	19.8493	19.84
	67	Isopropylbenzene	105	8.560	8.560	(1.116)	576662	20.6619	20.66
	68	1,1,2,2-Tetrachloroethane	83	8.837	8.833	(0.915)	170066	19.6328	19.63
$	69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	453017	48.8478	48.84
*	70	1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	532149	50.0000	
	71	1,2,3-Trichloropropane	75	8.863	8.860	(0.917)	128667	20.1979	20.19(M)
	73	n-Propylbenzene	91	8.908	8.908	(0.922)	677672	21.5379	21.53
	74	Bromobenzene	156	8.803	8.803	(0.911)	175469	20.6303	20.63
	75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	472118	20.5252	20.52
	76	2-Chlorotoluene	91	8.972	8.972	(0.929)	413845	20.5398	20.53
	77	4-Chlorotoluene	91	9.070	9.066	(0.939)	479001	20.6612	20.66
	78	tert-Butylbenzene	119	9.336	9.332	(0.966)	416054	21.1125	21.11
	79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	481704	20.3365	20.33
	81	sec-Butylbenzene	105	9.519	9.516	(0.985)	581377	21.5202	21.52
	82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	515598	21.1080	21.10
	83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	306968	20.2645	20.26
	84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	331691	20.4457	20.44
	87	n-Butylbenzene	91	9.992	9.992	(1.034)	455434	20.3970	20.39
	88	1,2-Dichlorobenzene	146	9.992	9.988	(1.034)	308352	20.1658	20.16
	89	1,2-Dibromo-3-Chloropropane	155	10.655	10.651	(1.103)	29452	20.1043	20.10
	90	1,2,4-Trichlorobenzene	180	11.338	11.334	(1.173)	200632	19.8281	19.82
	91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	93507	26.5994	26.59
	92	Naphthalene	128	11.544	11.540	(1.195)	480729	19.0343	19.03
	93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	187721	19.0378	19.03
M	94	1,2-Dichloroethylene (total)	96				276514	40.8918	40.89
M	95	Xylenes (total)	106				694896	61.2635	61.26
	141	Cyclohexane	56	4.121	4.121	(0.986)	172964	26.9842	26.98
	138	Freon TF	101	1.921	1.921	(0.459)	131488	27.9171	27.91
	147	Methylcyclohexane	55	5.388	5.381	(1.085)	256124	17.3853	17.38
	146	Methyl Acetate	43	2.236	2.236	(0.535)	115503	20.8985	20.89
	148	Tert-Butyl alcohol	59	2.438	2.438	(0.583)	321098	425.729	425.72
	149	Isopropyl Alcohol	45	2.101	2.097	(0.502)	181920	413.903	413.90

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.